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MONTHLY PROGRESS REPORT NO. 14
for the period April 1-30, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

aeromet inc.

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by

Aeromet, Inc.
Box FF
Norman, OK 73070

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for April, 1977 at Casper, Wyoming; near the Colorado C-b Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville Utah; Rock Springs, Wyoming; and the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made ½ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into seven parts, one corresponding to each of the seven field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Tract Field Summary

No problems were experienced during the month of April. The observer attempted 100% of the scheduled pilot balloon releases resulting in 93% recovery of the temperature data and 83% recovery of the wind data. Poor weather conditions and wind contributed to the 7% loss in temperature data and 17% loss in wind data.

The afternoon balloon launches continued to be at 1400L, however, the time change to daylight savings time puts the launch time at 1300 MST. The times given in the report continue to be standard time (MST).

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release ½ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	≤ 2
B	-1.9 - -1.7	≤ 5
C	-1.7 - -1.5	≤ 6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

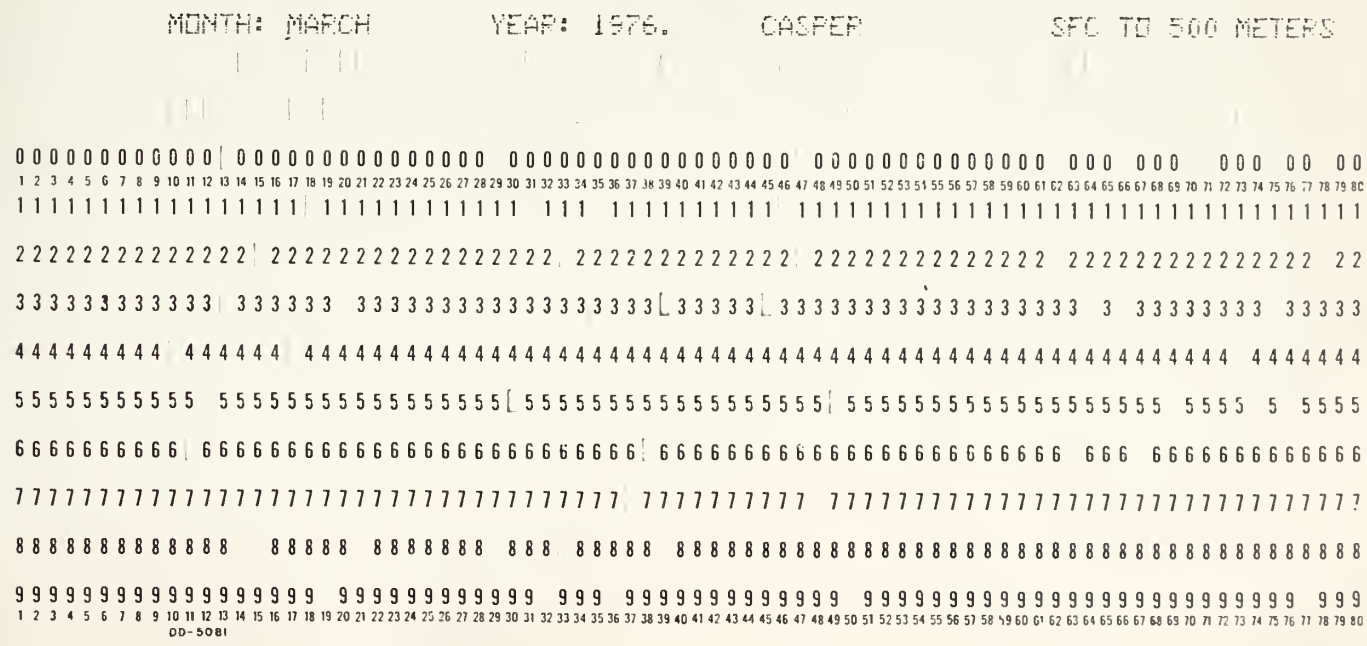
if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,



and the punched distribution data for each wind direction under each stability class in agreement with the "star" output. The stability classes are number coded as follows:

STABILITY CLASS	NUMBER CODE
A	1
B	2
C	3
D	4
E	5
F	6
Independent of Stability	7

The station I.D. numbers are as follows:

STATION	I.D. NUMBER
Casper, Wyoming	1
Colorado C-b Tract	2
Craig, Colorado	3
Escalante, Utah	4
Hanksville, Utah	5
Rock Springs, Wyoming	6
Utah U-a/U-b Tract	7

The month and season number codes are as follows:

MONTH	1-12
SEASON	13 = DJF
	14 = MAM
	15 = JJA
	16 = SON
ANNUAL	17

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
April, 1977

April 1	0601	Temperature values were interpolated over the interval from 7 3/4 to 13 minutes.
	1351	
April 3	0556	No wind observations made due to fog.
	1350	
April 5	0555	
	1351	
April 7	0550	
	1420	Temperature values were interpolated over the interval from 9 1/2 to 14 minutes.
April 9	0550	
	AFTN	No observations taken due to high winds.
April 11	0545	
	AFTN	No observations taken due to thunderstorm in vicinity.
April 13	0547	Balloon entered the clouds after 8 1/2 minutes.
	1350	Temperature values were interpolated over the interval from 12 to 14 1/4 minutes.
April 15	0542	Balloon entered the clouds after 10 1/2 minutes.
	1352	No wind observations taken due to rain.

PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
April, 1977

April 17	0536	
	1350	
April 19	0531	Balloon entered the clouds after 7 minutes.
	1352	
April 21	0529	
	1350	
April 23	0528	
	1345	
April 25	0525	
	1350	
April 27	0421	No wind observations taken due to light rain.
	1254	
April 29	0421	
	1259	Balloon entered the clouds after 10 minutes.

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

April, 1977

HEIGHT IN METERS

	MORNING			AFTERNOON		
DATE	0°	+5°	+10°	0°	+5°	+10°
1	sfc	200m	3400m	800m	1600m	2200m
3	sfc	150m	500m	900m	2150m	2750m
5	sfc	500m	1900m	250m	1300m	2300m
7	50m	250m	400m	150m	1600m	2950m
9	sfc	250m	325m			
11	50m	300m	1000m			
13	sfc	550m	1300m	sfc	950m	2500m
15	50m	850m	1750m	sfc	750m	1650m
17	sfc	300m	500m	sfc	1200m	2950m
19	sfc	750m	1950m	sfc	1250m	1850m
21	sfc	250m	550m	50m	2150m	3350m
23	sfc	100m	250m	150m	1600m	3600m
25	sfc	150m	600m	300m	1000m	2300m
27	sfc	500m	3800m	150m	1200m	1800m
29	50m	200m	650m	sfc	800m	1300m

CLOUD COVER AND SIGNIFICANT WEATHER

Utah U-a/U-b Tract

April, 1977

DATE	MORNING	AFTERNOON
1	broken	scattered
3	fog	scattered
5	broken	broken
7	clear	scattered
9	scattered	windy
11	overcast	overcast, TRW
13	overcast	scattered
15	overcast	overcast, rain
17	scattered	scattered
19	overcast	overcast
21	clear	clear
23	scattered	scattered
25	broken	scattered
27	overcast, rain	broken
29	clear	scattered

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4276

DATE 04/01/77 TIME 06:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	305.	1.11	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4274

DATE 04/01/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	153.	0.0	-2.44

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4272

DATE 04/03/77 TIME 05:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	1.46	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4282

DATE 04/03/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
478.	517.	0.0	-0.93

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4399

DATE 04/05/77 TIME 05:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	152.	1.12	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4401

DATE 04/05/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
208.	399.	0.24	-1.53

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4403

DATE 04/07/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	1105.	0.77	-1.26

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4405

DATE 04/07/77 TIME 10:20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	76.	0.94	-1.39

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4398

DATE 04/09/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	610.	1.83	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4400

DATE 04/11/77 TIME 05:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	533.	0.53	-0.97

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4402

DATE 04/13/77 TIME 05:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	305.	0.47	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4404

DATE 04/13/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	0.44	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/15/77 TIME 05:42MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	114.	0.0	-0.50

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

DATE 04/15/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
191.	497.	0.12	-0.79

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4495

DATE 04/17/77 TIME 05:36MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1181.	0.56	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4397

DATE 04/17/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	0.65	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4370

DATE 04/19/77 TIME 05:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	38.	1.76	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4392

DATE 04/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	38.	0.47	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/21/77 TIME 05:29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	914.	0.65	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4396

DATE 04/21/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	152.	0.70	-0.71

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4382

DATE 04/23/77 TIME 05:28MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	991.	0.84	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4384

DATE 04/23/77 TIME 13:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	116.	0.0	-1.15

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4386

DATE 04/25/77 TIME 05:25MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	1105.	0.43	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4388

DATE 04/25/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
224.	262.	0.92	-1.25

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4383

DATE 04/27/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.04	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4385

DATE 04/27/77 TIME 12:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
741.	970.	0.07	-0.82

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4387

DATE 04/29/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	343.	1.45	-0.26

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4389

DATE 04/29/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	114.	0.36	0.0

MONTH: APRIL YEAR: 1977. UTAH UAUB ELEV 1585 METERS

HOLZWORTHIS CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M) SFC	1-100	101-250	251-500	501-750	751-1000	1000-1500	1501-2000	2001-2500	2501-3000	TOTAL
1 - 100	2	4	1	1	0	0	0	0	0	0	8
101 - 250	4	1	1	0	1	0	0	0	0	0	7
251 - 500	4	2	1	0	0	0	0	0	0	0	7
501 - 750	1	0	0	0	0	0	0	0	0	0	1
751 - 1000	2	0	0	0	0	0	0	0	0	0	2
1001 - 1500	2	1	0	0	0	0	0	0	0	0	3
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	15	8	3	1	1	0	0	0	0	0	28

FROM											
DT/DZ	5	1	0	0	0	0	0	0	0	0	1
INV	4	2	1	0	0	0	0	0	0	0	3
BASE	3	2	0	1	1	0	0	0	0	0	4
TO	2	2	2	0	0	0	0	0	0	0	4
SFC	1	1	0	0	0	0	0	0	0	0	1

NO INV TOT							
DT/DZ FOR	5	0	0	0	0	0	0
SAME	4	0	0	0	0	0	0
LAYERS	3	0	0	0	0	0	0
AS INV	2	0	0	0	0	0	0
BASE	1	0	0	0	0	0	0

DT/DZ (DEG C)/100M

5= 0.00 TO -0.40

4=-0.41 TO -0.80

3=-0.81 TO -1.20

2=-1.21 TO -1.60

1=<-1.60

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.08	0.08	0.0	0.08	0.0	0.0	5.5	0.25
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.08	0.0	0.0	0.0	7.9	0.08
WSW	0.08	0.08	0.0	0.0	0.0	0.0	3.0	0.17
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.17	0.17	0.08	0.0	0.0	0.0	3.9	0.42
NW	0.0	0.08	0.0	0.0	0.0	0.0	3.2	0.08
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	1.7	4.1	7.4	10.8	0.0	0.0		0.0
TOTAL	0.33	0.42	0.17	0.08	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.48

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.08	0.0	0.0	0.0	0.0	0.0	1.4	0.08
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.08	0.0	0.0	0.0	0.0	4.2	0.08
SE	0.15	0.0	0.0	0.0	0.0	0.0	1.9	0.15
SSE	0.08	0.08	0.0	0.0	0.0	0.0	3.2	0.15
S	0.0	0.08	0.0	0.0	0.0	0.0	3.1	0.08
SSW	0.15	0.08	0.0	0.0	0.0	0.0	2.0	0.23
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.08	0.0	0.0	0.0	0.0	0.0	1.7	0.08
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.08	0.08	0.0	0.0	0.0	0.0	3.1	0.15
AVG SPEED	1.8	3.7	0.0	0.0	0.0	0.0		0.0
TOTAL	0.62	0.38	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.52

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: APRIL YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.04	0.0	0.0	0.0	0.0	0.0	1.4	0.04
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.04	0.0	0.0	0.0	0.0	4.2	0.04
SE	0.08	0.0	0.0	0.0	0.0	0.0	1.9	0.08
SSE	0.08	0.08	0.0	0.04	0.0	0.0	4.6	0.20
S	0.0	0.04	0.0	0.0	0.0	0.0	3.1	0.04
SSW	0.08	0.04	0.0	0.0	0.0	0.0	2.0	0.12
SW	0.0	0.0	0.04	0.0	0.0	0.0	7.9	0.04
WSW	0.04	0.04	0.0	0.0	0.0	0.0	3.0	0.08
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.12	0.08	0.04	0.0	0.0	0.0	3.5	0.24
NW	0.0	0.04	0.0	0.0	0.0	0.0	3.2	0.04
NNW	0.04	0.04	0.0	0.0	0.0	0.0	3.1	0.08
AVG SPEED	1.7	3.9	7.4	10.8	0.0	0.0		0.0
TOTAL	0.48	0.40	0.08	0.04	0.0	0.0		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 3 SOUNDINGS FROM A SAMPLE OF 28 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4276

DATE 04/01/77 TIME 06:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-4.48		0.0		1.5	315.
1.0	150	1735	-1.86	2.62	1.71	4.60	1.5	349.
1.8	* 266	1851	-1.09		1.14	4.07		
2.0	300	1885	-1.09	0.77	0.19	3.12	4.4	343.
2.7	415.	2000.	-2.15	-0.77	-2.66	0.27	4.3	351.
3.3	500	2085	-2.70	-0.84	-1.91	1.02	3.7	356.
6.0	915.	2500.	-6.43	-3.23	-2.70	0.23	0.9	75.
9.1	1415.	?3000.	-10.85	-4.92	-3.12	-0.19	2.6	252.
15.0	2415.	4000.	-21.83	-10.97	-4.78	-1.85		
20.6	3415.	5000.	-28.51	-6.68	0.0	2.93		
27.1	4415.	6000.	-33.45	-4.94	-3.05	-0.12		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4276

DATE 04/01/77 TIME 06:01MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.1	-1.1	1.5	315.
0.5	76.	1661.	0.6	0.3	0.6	245.
1.0	152.	1737.	0.2	-1.5	1.5	353.
1.5	229.	1814.	0.5	-2.4	2.5	348.
2.0	305.	1890.	1.4	-4.4	4.6	342.
2.5	381.	1966.	0.8	-4.3	4.4	349.
3.0	457.	2042.	0.4	-4.1	4.1	354.
3.5	533.	2118.	0.1	-3.4	3.4	358.
4.0	610.	2195.	-0.5	-2.6	2.6	10.
4.5	686.	2271.	-1.3	-2.0	2.4	33.
5.0	762.	2347.	-1.6	-2.0	2.6	39.
5.5	838.	2423.	-1.4	-0.6	1.6	68.
6.0	914.	2499.	-0.9	-0.2	0.9	76.
6.5	991.	2576.	-0.4	-1.5	1.6	15.
7.0	1067.	2652.	0.9	-1.7	1.9	333.
7.5	1150.	2735.	1.8	-1.9	2.6	316.
8.0	1204.	2829.	2.4	-1.1	2.7	295.
8.5	1322.	2907.	3.2	-0.0	3.2	271.
9.0	1401.	2986.	2.4	0.7	2.5	255.
9.5	1481.	3066.	2.3	1.4	2.7	238.
10.0	1560.	3145.	2.0	1.3	2.4	236.
10.5	1639.	3224.	2.8	1.4	3.1	244.
11.0	1719.	3304.	2.9	0.9	3.1	253.
11.5	1799.	3384.	3.6	0.8	3.7	257.
12.0	1879.	3464.	3.5	0.5	3.5	261.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4274

DATE 04/01/77 TIME 1315MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 500M	D/T LAPSE	WS M/S	WD DEG
	SFC		10.25		0.0		6.2	225.
0.8	150	1735	8.39	-1.86	-3.31	-0.38	12.5	222.
1.5	300	1885	6.71	-1.68	-3.14	-0.21	5.4	232.
2.2	415.	2000.	5.21	-1.13	-3.72	-0.79	4.7	235.
2.6	500	2085	4.06	-1.53	-4.47	-1.55	6.6	238.
5.0	915.	2500.	2.08	-1.98	0.19	3.12	6.3	249.
8.0	1415.	3000.	-0.13	-2.49	0.38	3.31	13.8	258.
14.6	2415.	4000.	-2.24	-1.83	-2.28	0.64		
21.1	3415.	5000.	-6.82	-4.58	-0.58	2.35		
27.6	4415.	6000.	-8.29	-1.47	-0.58	2.35		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4274

DATE 04/01/77 TIME 1315MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.4	4.4	6.2	225.
0.5	76.	1661.	6.7	7.7	10.2	221.
1.0	218.	1803.	10.2	10.6	14.7	224.
1.5	302.	1887.	4.0	3.2	5.1	232.
2.0	380.	1965.	3.1	2.3	3.8	233.
2.5	487.	2072.	5.6	3.5	6.6	238.
3.0	591.	2176.	5.6	3.8	6.8	236.
3.5	690.	2275.	5.7	2.7	6.3	245.
4.0	767.	2352.	3.6	0.5	3.7	263.
4.5	843.	2428.	5.2	1.9	5.5	249.
5.0	919.	2504.	5.9	2.3	6.4	249.
5.5	995.	2580.	6.7	1.9	7.0	254.
6.0	1071.	2656.	7.3	1.9	7.6	256.
6.5	1160.	2745.	8.7	2.7	9.1	253.
7.0	1258.	2843.	9.0	2.6	9.3	254.
7.5	1334.	2919.	12.4	3.2	12.8	256.
8.0	1410.	2995.	13.4	2.9	13.7	258.
8.5	1487.	3072.	15.0	3.0	15.3	259.
9.0	1563.	3148.	15.4	4.1	15.9	255.
9.5	1639.	3224.	15.3	6.2	16.5	248.
10.0	1715.	3300.	17.4	5.9	18.4	251.
10.5	1791.	3376.	19.2	7.1	20.5	250.
11.0	1868.	3453.	21.5	7.9	23.0	250.
11.5	1944.	3529.	21.0	7.1	22.1	251.
12.0	2020.	3605.	23.4	7.2	24.5	253.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4272

DATE 04/03/77 TIME 05:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-11.65		0.0		1.5	225.
0.3	* 38	1621	-11.55		0.0	0.0		
1.0	150	1735	-7.92	3.73	7.76	10.68	M	M
1.3	* 180	1770	-6.92		4.83	7.76		
2.0	300	1885	-6.63	1.29	0.19	3.12	M	M
2.7	415.	2000.	-6.82	-0.20	-0.58	2.35	M	M
3.3	500	2085	-6.92	-0.10	-0.96	1.96	M	M
6.0	915.	2500.	-9.87	-2.95	-2.52	0.40	M	M
9.2	1415.	3000.	-12.45	-2.58	-1.96	0.97	M	M
15.8	2415.	4000.	-18.15	-5.70	-1.78	1.14		
21.7	3415.	5000.	-25.75	-7.60	-2.61	0.32		
28.1	4415.	6000.	-35.93	-7.18	-2.43	0.48		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4272

DATE 04/03/77 TIME 05:56MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.1	1.1	1.5	225.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4282

DATE 04/03/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		1.31		0.0		2.6	315.
1.0	150	1735	-0.29	-1.53	-1.89	1.04	1.0	323.
2.0	300	1885	-1.56	-1.34	-3.99	-1.06	0.9	280.
2.6	415.	2000.	-3.19	-1.45	-2.29	0.64	1.4	293.
3.1	500.	2085	-3.12	-0.11	-5.56	-2.63	1.3	292.
4.6	915.	2500.	-8.00	-4.78	-0.77	2.15	3.1	292.
7.8	1415.	3000.	-9.18	-1.27	-4.47	-1.54	8.3	5.
13.5	2415.	4000.	-16.14	-6.97	-0.99	1.94		
20.0	3415.	5000.	-18.85	-2.71	-2.38	0.55		
25.6	4415.	6000.	-27.08	-8.22	-2.01	0.92		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4282

DATE 04/03/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	-1.8	2.6	315.
0.5	76.	1661.	1.6	-1.0	1.9	301.
1.0	153.	1738.	0.6	-0.8	1.0	323.
1.5	229.	1814.	1.0	-0.0	1.0	272.
2.0	305.	1890.	0.8	-0.2	0.9	280.
2.5	402.	1987.	1.3	-0.5	1.4	292.
3.0	478.	2063.	1.2	-0.7	1.4	301.
3.5	565.	2150.	1.0	0.1	1.0	267.
4.0	731.	2316.	1.3	-1.3	1.9	316.
4.5	902.	2487.	1.0	-2.7	2.9	340.
5.0	991.	2576.	-1.3	-3.7	3.9	19.
5.5	1068.	2653.	0.8	-4.2	4.2	350.
6.0	1144.	2729.	0.3	-5.4	5.4	356.
6.5	1220.	2805.	1.0	-4.6	4.7	348.
7.0	1296.	2881.	-0.4	-7.1	7.1	3.
7.5	1374.	2959.	-0.8	-8.3	8.3	5.
8.0	1450.	3035.	-0.7	-8.3	8.4	5.
8.5	1581.	3166.	0.1	-12.3	12.3	360.
9.0	1707.	3292.	-0.0	-13.4	13.4	0.
9.5	1783.	3368.	-0.5	-11.0	11.0	3.
10.0	1859.	3444.	-0.7	-11.6	11.6	4.
10.5	1935.	3520.	0.0	-12.3	12.3	360.
11.0	2012.	3597.	-0.0	-11.5	11.5	0.
11.5	2105.	3690.	-0.1	-12.7	12.7	1.
12.0	2181.	3766.	-0.9	-11.6	11.6	4.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4399

DATE 04/05/77 TIME 05:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.74		0.0		1.0	135.
1.0	150	1735	4.44	1.70	0.93	3.86	2.7	160.
2.0	300	1885	3.70	-0.75	-1.49	1.43	0.7	173.
2.7	415.	2000.	2.84	-0.88	-1.68	1.24	1.4	264.
3.3	500	2085	2.47	-0.74	-1.12	1.80	2.7	273.
6.0	915.	2500.	0.83	-1.34	-1.88	1.04	3.8	10.
9.2	1415.	3000.	-2.25	-2.99	-3.43	-0.50	5.6	9.
15.6	2415.	4000.	-6.82	-4.96	-2.51	0.42		
21.8	3415.	5000.	-15.44	-8.61	-2.56	0.37		
28.2	4415.	6000.	-15.34	0.10	-1.18	1.75		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4399

DATE 04/05/77 TIME 05:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	0.7	1.0	135.
0.5	76.	1661.	-0.2	2.1	2.2	174.
1.0	152.	1737.	-0.9	2.5	2.7	160.
1.5	229.	1814.	-0.2	1.4	1.4	171.
2.0	305.	1890.	-0.1	0.7	0.7	173.
2.5	381.	1966.	0.8	0.1	0.8	262.
3.0	457.	2042.	2.1	0.1	2.1	267.
3.5	533.	2118.	3.3	-0.4	3.3	277.
4.0	610.	2195.	4.0	-0.8	4.0	281.
4.5	686.	2271.	2.2	-0.8	2.3	289.
5.0	762.	2347.	0.7	-0.8	1.0	316.
5.5	838.	2423.	-1.2	-2.5	2.8	335.
6.0	914.	2499.	-0.7	-3.8	3.8	10.
6.5	991.	2576.	-1.4	-4.1	4.3	18.
7.0	1067.	2652.	-1.3	-4.9	5.1	15.
7.5	1143.	2728.	-0.9	-4.6	4.7	11.
8.0	1219.	2804.	-0.6	-5.3	5.4	7.
8.5	1295.	2880.	-0.9	-5.0	5.1	10.
9.0	1374.	2959.	-1.1	-5.5	5.6	11.
9.5	1456.	3041.	-0.6	-5.5	5.6	7.
10.0	1546.	3131.	-0.7	-6.4	6.4	6.
10.5	1631.	3216.	-1.0	-8.3	8.4	7.
11.0	1707.	3292.	1.1	-10.6	10.6	354.
11.5	1783.	3368.	1.9	-12.4	12.5	352.
12.0	1859.	3444.	2.5	-13.1	13.3	349.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4401

DATE 04/05/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		15.74		0.0		2.6	315.
0.8	150	1735	12.95	-2.78	-2.70	0.23	5.1	315.
1.6	300	1885	12.80	-0.15	-0.18	2.75	3.8	319.
2.4	415.	2000.	12.37	-0.40	-2.16	0.76	2.2	299.
2.9	500	2085	11.91	-0.49	-2.90	0.03	1.4	83.
5.6	915.	2500.	9.32	-2.93	-4.21	-1.28	4.2	18.
8.8	1415.	3000.	7.37	-1.61	-1.66	1.27	4.5	27.
14.7	2415.	4000.	2.74	-4.63	-0.56	2.37		
16.8	*2728	4313	1.79		1.13	4.05		
19.8	*3185	4770	4.45		-0.37	2.55		
21.2	3415.	5000.	2.74	-0.00	1.50	4.43		
27.3	4415.	6000.	-3.21	-5.96	-3.44	-0.51		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4401

DATE 04/05/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	-1.8	2.6	315.
0.5	76.	1661.	2.2	-2.0	3.0	312.
1.0	208.	1793.	4.5	-5.0	6.7	318.
1.5	284.	1868.	2.4	-3.3	4.1	324.
2.0	361.	1946.	2.2	-1.3	2.6	301.
2.5	437.	2022.	1.8	-1.0	2.0	299.
3.0	513.	2098.	-0.8	-1.0	1.3	38.
3.5	590.	2175.	-1.7	-1.5	2.3	49.
4.0	670.	2255.	-1.5	-3.1	3.4	26.
4.5	746.	2331.	-1.4	-3.0	3.3	25.
5.0	822.	2407.	-0.9	-3.8	3.9	13.
5.5	898.	2483.	-1.2	-3.9	4.1	17.
6.0	978.	2563.	-1.7	-4.1	4.5	23.
6.5	1070.	2655.	-2.4	-4.0	4.7	31.
7.0	1146.	2731.	-1.4	-2.9	3.2	26.
7.5	1222.	2807.	-1.4	-3.6	3.9	21.
8.0	1298.	2883.	-1.9	-3.8	4.3	27.
8.5	1375.	2960.	-2.0	-4.2	4.7	26.
9.0	1451.	3036.	-2.0	-3.8	4.3	27.
9.5	1536.	3121.	-1.2	-3.7	3.9	18.
10.0	1668.	3253.	-1.4	-6.3	6.5	13.
10.5	1776.	3361.	-3.7	-5.2	6.4	35.
11.0	1852.	3437.	-4.1	-4.7	6.3	41.
11.5	1929.	3514.	-4.5	-4.5	6.4	45.
12.0	2005.	3590.	-4.1	-3.5	5.4	50.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4403

DATE 04/07/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-2.25		0.0		1.5	135.
1.0	150	1736	-2.24	0.00	2.28	5.21	2.2	91.
1.0	* 152	1737	-2.25		2.28	5.21		
2.0	300.	1886	-0.13	2.12	5.66	8.59	2.0	199.
2.7	415.	2000.	0.73	3.33	5.98	8.91	2.7	230.
3.0	* 457	2042	0.73		5.98	8.91		
3.3	500.	2085	0.81	1.61	0.0	2.93	3.0	208.
6.0	915.	2500.	5.02	0.02	0.19	3.11	2.6	232.
9.3	1415.	3000.	0.36	-0.48	-1.86	1.06	0.2	254.
15.6	2415.	4000.	-2.72	-7.08	-4.96	-2.03		
20.9	3415.	5000.	-12.34	-9.62	-4.30	-1.37		
27.0	4415.	6000.	-17.24	-4.90	-1.98	0.95		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4403

DATE 04/07/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.1	1.1	1.5	135.
0.5	76.	1661.	-0.9	1.2	1.5	146.
1.0	152.	1737.	-2.3	-0.2	2.3	89.
1.5	229.	1814.	-0.3	2.9	2.9	173.
2.0	305.	1890.	0.7	1.8	1.9	200.
2.5	381.	1966.	2.1	1.1	2.4	243.
3.0	457.	2042.	1.8	2.7	3.2	214.
3.5	533.	2118.	1.1	2.9	3.0	203.
4.0	610.	2195.	0.5	1.9	2.0	196.
4.5	686.	2271.	1.5	0.9	1.8	238.
5.0	762.	2347.	1.5	0.6	1.6	248.
5.5	838.	2423.	0.8	1.6	1.8	219.
6.0	914.	2499.	2.1	1.6	2.6	232.
6.5	991.	2576.	3.7	1.3	3.9	250.
7.0	1067.	2652.	4.7	1.0	4.8	258.
7.5	1143.	2728.	5.3	0.8	5.3	262.
8.0	1219.	2804.	5.1	-0.0	5.1	270.
8.5	1295.	2880.	4.9	0.6	5.0	264.
9.0	1372.	2957.	4.6	1.2	4.7	258.
9.5	1448.	3033.	3.6	1.2	3.8	252.
10.0	1524.	3109.	2.8	1.6	3.2	241.
10.5	1600.	3185.	3.0	2.1	3.7	235.
11.0	1676.	3261.	3.0	2.0	3.6	236.
11.5	1753.	3338.	2.4	1.6	2.8	237.
12.0	1829.	3414.	2.3	1.7	2.9	234.

UTAH UAHB ELEV 1585 METERS SOUNDING ID 4405

DATE 04/07/77 TIME 14:20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		20.73		0.0		5.7	225.
1.0	150	1735	19.42	-1.32	-2.44	0.49	5.8	217.
1.9	300	1885	17.82	-1.60	-4.39	-1.46	1.2	189.
2.6	415.	2000.	17.54	-0.31	-0.88	8.04	2.7	240.
3.1	500	2085	16.67	-0.84	-2.65	0.28	2.2	281.
5.3	915.	2500.	12.83	-3.83	-4.69	-1.76	5.5	250.
8.2	1415.	3000.	10.25	-2.77	-0.55	2.38	2.5	265.
14.8	2415.	4000.	3.98	-6.09	-2.24	0.69		
21.3	3415.	5000.	0.16	-3.82	-0.38	2.55		
27.7	4415.	6000.	-4.28	-4.44	-5.56	-2.63		

UTAH UAHB ELEV 1585 METERS SOUNDING ID 4405

DATE 04/07/77 TIME 14:20MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.0	4.0	5.7	225.
0.5	76.	1661.	2.9	3.0	4.2	223.
1.0	152.	1737.	3.5	4.7	5.9	217.
1.5	230.	1815.	2.4	3.7	4.4	213.
2.0	309.	1894.	0.1	0.9	0.9	186.
2.5	403.	1988.	2.2	1.6	2.7	234.
3.0	479.	2064.	2.5	-0.0	2.5	270.
3.5	555.	2140.	1.1	-0.9	1.4	309.
4.0	631.	2216.	2.1	-0.7	2.2	290.
4.5	707.	2292.	3.7	0.1	3.7	269.
5.0	860.	2445.	5.2	1.6	5.5	253.
5.5	949.	2534.	5.2	2.1	5.6	248.
6.0	1057.	2642.	5.3	2.4	5.8	246.
6.5	1152.	2737.	5.8	1.9	6.1	252.
7.0	1229.	2814.	4.9	1.3	5.1	255.
7.5	1305.	2890.	3.9	0.6	4.0	262.
8.0	1381.	2966.	2.6	0.1	2.6	267.
8.5	1457.	3042.	2.4	0.3	2.4	264.
9.0	1533.	3118.	3.9	0.8	4.0	259.
9.5	1610.	3195.	3.8	1.0	4.0	255.
10.0	1686.	3271.	3.9	1.2	4.1	254.
10.5	1762.	3347.	3.8	1.2	4.0	252.
11.0	1838.	3423.	3.7	1.1	3.9	254.
11.5	1914.	3499.	3.5	1.2	3.7	252.
12.0	1991.	3576.	3.7	0.8	3.8	258.

UTAH UAUS ELEV 1585 METERS SOUNDING ID 439A

DATE 04/09/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		1.79		0.0		2.6	135.
1.0	150	1735	1.80	0.01	0.19	3.12	8.4	154.
1.8	* 266	1851	1.79		8.59	11.51		
2.0	300	1885	2.73	0.93	14.07	17.00	10.5	150.
2.7	415.	2000.	11.45	7.97	6.17	9.10	13.6	163.
3.3	500	2085	12.51	1.81	2.89	5.82	16.8	164.
4.0	* 609	2194	12.92		0.36	3.29		
6.0	915.	2500.	12.09	-0.33	-0.54	2.39	14.3	167.
9.3	1415.	3000.	10.07	-2.11	-1.46	1.47	21.6	199.
15.8	2415.	4000.	5.77	-4.30	-1.30	1.63		
22.3	3415.	5000.	-0.22	-5.99	-1.70	1.23		

UTAH UAUS ELEV 1585 METERS SOUNDING ID 439A

DATE 04/09/77 TIME 05:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-2.6	5.0	5.7	153.
1.0	152.	1737.	-3.7	7.6	8.5	154.
1.5	229.	1814.	-5.6	7.1	9.0	142.
2.0	305.	1890.	-5.2	9.3	10.6	151.
2.5	381.	1966.	-4.3	11.8	12.6	160.
3.0	457.	2042.	-3.8	14.9	15.3	166.
3.5	533.	2118.	-5.3	17.1	17.9	163.
4.0	610.	2195.	-4.6	18.0	18.5	166.
4.5	686.	2271.	-2.9	15.0	15.3	169.
5.0	762.	2347.	-2.5	14.8	15.0	171.
5.5	838.	2423.	-2.3	14.0	14.2	171.
6.0	914.	2499.	-3.3	13.9	14.3	167.
6.5	991.	2576.	-0.9	14.9	14.9	177.
7.0	1067.	2652.	3.1	16.1	16.4	191.
7.5	1143.	2728.	4.9	18.5	19.1	195.
8.0	1219.	2804.	3.8	20.8	21.1	190.
8.5	1295.	2880.	5.8	19.6	20.4	196.
9.0	1372.	2957.	6.2	20.1	21.0	197.
9.5	1448.	3033.	7.5	20.7	22.0	200.
10.0	1524.	3109.	8.3	18.1	20.0	205.
10.5	1600.	3185.	9.8	18.3	20.7	208.
11.0	1676.	3261.	9.5	18.8	20.7	207.
11.5	1753.	3338.	8.9	19.5	21.0	208.
12.0	1829.	3414.	9.5	18.7	21.1	207.

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4400

DATE 04/11/77 TIME 05:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		6.71		0.0		2.1	315.
1.0	150	1735	6.70	-0.01	1.48	4.40	0.7	313.
2.0	300	1885	7.00	0.29	2.94	5.87	0.8	29.
2.0	* 304	1889	6.99		2.94	5.87		
2.7	415.	2000.	8.95	1.95	0.73	3.66	3.2	74.
3.3	500	2085	8.95	0.00	-1.28	1.65	5.5	83.
6.0	915.	2500.	6.52	-2.15	-1.48	1.45	9.5	72.
9.3	1415.	3000.	4.54	-2.26	-1.12	1.81	7.9	106.
15.8	2415.	4000.	-0.80	-5.34	-1.89	1.03		
22.0	3415.	5000.	-9.76	-8.97	-2.91	0.02		
28.4	4415.	6000.	-17.24	-7.48	-0.59	2.34		

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4400

DATE 04/11/77 TIME 05:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.5	-1.5	2.1	315.
0.5	76.	1661.	0.9	-0.4	1.0	291.
1.0	152.	1737.	0.5	-0.5	0.7	314.
1.5	229.	1814.	0.5	-0.2	0.5	296.
2.0	305.	1890.	-0.2	-0.8	0.8	11.
2.5	381.	1966.	-2.4	-0.8	2.5	71.
3.0	457.	2042.	-4.0	-0.8	4.1	79.
3.5	533.	2118.	-6.6	-0.4	6.6	87.
4.0	610.	2195.	-7.5	-0.3	7.5	88.
4.5	686.	2271.	-8.0	-0.7	8.0	85.
5.0	762.	2347.	-9.2	-1.2	9.3	83.
5.5	838.	2423.	-9.8	-2.4	10.1	76.
6.0	914.	2499.	-9.0	-2.9	9.5	72.
6.5	991.	2576.	-8.3	-2.6	8.7	72.
7.0	1067.	2652.	-9.0	-1.3	9.1	82.
7.5	1143.	2728.	-8.6	-0.4	8.6	88.
8.0	1219.	2804.	-8.9	0.0	8.9	90.
8.5	1295.	2880.	-9.5	-0.1	9.5	90.
9.0	1372.	2957.	-8.2	0.8	8.2	96.
9.5	1448.	3033.	-7.0	3.1	7.6	114.
10.0	1524.	3109.	-5.2	4.1	6.6	128.
10.5	1600.	3185.	-5.0	4.7	6.8	133.
11.0	1676.	3261.	-5.3	5.3	7.5	135.
11.5	1753.	3338.	-5.0	5.5	7.5	138.
12.0	1829.	3414.	-4.0	6.3	7.5	147.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4402

DATE 04/13/77 TIME 05:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		3.69		0.0		1.3	135.
1.0	150	1735	4.63	0.94	2.23	5.16	2.0	135.
2.0	300	1885	5.11	0.47	-2.05	0.88	2.1	141.
2.7	415.	2000.	3.69	-1.13	-1.31	1.62	3.2	134.
3.3	500	2085	3.31	-0.66	-1.68	1.25	3.9	135.
6.0	915.	2500.	1.60	-1.61	-0.56	2.36	1.7	128.
9.3	1415.	3000.	-0.03	-1.73	-1.13	1.79	M	M
15.8	2415.	4000.	-4.86	-4.93	-4.03	-1.10		
22.0	3415.	5000.	-12.55	-7.58	-2.94	-0.01		
28.5	4415.	6000.	-19.66	-7.11	-1.79	1.14		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4402

DATE 04/13/77 TIME 05:47MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.9	0.9	1.3	135.
0.5	76.	1661.	-0.1	1.5	1.5	177.
1.0	152.	1737.	-1.5	1.4	2.1	134.
1.5	229.	1814.	-1.5	1.4	2.0	133.
2.0	305.	1890.	-1.3	1.6	2.1	141.
2.5	381.	1966.	-1.8	2.1	2.8	139.
3.0	457.	2042.	-2.8	2.2	3.6	128.
3.5	533.	2118.	-2.6	3.1	4.1	140.
4.0	610.	2195.	-3.0	4.8	5.9	144.
4.5	686.	2271.	-2.8	4.6	5.2	152.
5.0	762.	2347.	-1.9	3.0	3.5	147.
5.5	838.	2423.	-1.5	1.5	2.1	136.
6.0	914.	2499.	-1.4	1.1	1.7	128.
6.5	991.	2576.	-1.3	0.2	1.3	99.
7.0	1067.	2652.	-1.6	-0.5	1.6	73.
7.5	1143.	2728.	-1.0	-0.7	1.2	53.
8.0	1219.	2804.	-0.5	-0.2	0.6	66.
8.5	1295.	2880.	-0.9	0.2	0.9	100.

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4404

DATE 04/13/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		12.09		0.0		3.1	135.
1.0	150	1735	12.37	0.28	-0.36	2.57	1.3	112.
1.9	300	1885	11.47	-0.90	-2.90	0.03	1.9	125.
2.7	415.	2000.	10.44	-1.02	-2.91	0.01	3.1	165.
3.2	500	2085	9.34	-1.11	-2.92	0.01	4.3	172.
5.9	915.	2500.	7.74	-1.60	-0.74	2.19	4.7	212.
9.0	1415.	3000.	4.64	-3.10	-0.37	2.56	8.4	239.
15.5	2415.	4000.	-1.56	-6.20	-2.28	0.65		
21.8	3415.	5000.	-6.33	-4.77	-2.12	0.81		

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4404

DATE 04/13/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1586.	-2.2	2.2	3.1	135.
0.5	76.	1661.	0.3	0.1	0.4	253.
1.0	152.	1737.	-1.3	0.4	1.4	107.
1.5	229.	1814.	-0.9	0.6	1.1	127.
2.0	313.	1898.	-1.7	1.2	2.0	125.
2.5	389.	1974.	-0.7	2.5	2.6	164.
3.0	471.	2056.	-1.0	4.0	4.2	167.
3.5	547.	2132.	0.1	4.6	4.6	181.
4.0	623.	2208.	0.8	5.6	5.7	188.
4.5	701.	2286.	0.7	5.8	5.8	187.
5.0	777.	2362.	2.1	4.8	5.2	204.
5.5	853.	2438.	2.1	4.5	5.0	206.
6.0	929.	2514.	2.5	3.9	4.6	213.
6.5	1006.	2591.	4.0	4.0	5.6	225.
7.0	1082.	2667.	4.8	4.3	6.5	228.
7.5	1158.	2743.	5.4	3.7	6.5	236.
8.0	1252.	2837.	5.7	3.7	6.8	237.
8.5	1339.	2924.	6.0	3.2	6.8	242.
9.0	1416.	3001.	7.2	4.3	8.4	239.
9.5	1492.	3077.	7.4	3.7	8.3	244.
10.0	1568.	3153.	7.1	2.6	7.6	250.
10.5	1644.	3229.	6.8	1.2	6.9	260.
11.0	1720.	3305.	7.8	1.2	7.8	261.
11.5	1797.	3382.	7.0	2.0	7.2	254.
12.0	1875.	3460.	7.3	2.6	7.7	250.

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/15/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.84		0.0		3.1	270.
1.0	150	1735	2.36	-0.47	-1.31	1.61	5.4	286.
2.0	300	1885	1.79	-0.57	-0.94	1.99	5.3	301.
2.7	415.	2000.	0.83	-0.86	-2.45	0.48	5.6	311.
3.3	500	2085	0.10	-0.84	-1.51	1.42	5.6	316.
6.0	915.	2500.	-1.67	-1.27	-2.28	0.65	4.1	353.
9.2	1415.	3000.	-4.19	-3.01	-1.92	1.01	10.1	34.
15.8	2415.	4000.	-7.60	-3.41	-1.74	1.19		
22.4	3415.	5000.	-12.55	-4.95	0.0	2.93		
28.9	4415.	6000.	-16.84	-4.29	0.0	2.93		

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/15/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	3.1	0.0	3.1	270.
0.5	76.	1661.	3.9	-0.3	4.0	275.
1.0	152.	1737.	5.2	-1.6	5.5	287.
1.5	229.	1814.	4.8	-2.4	5.3	297.
2.0	305.	1890.	4.5	-2.8	5.3	302.
2.5	381.	1966.	4.2	-3.5	5.5	310.
3.0	457.	2042.	4.1	-3.9	5.6	313.
3.5	533.	2118.	3.7	-4.1	5.5	318.
4.0	610.	2195.	5.0	-4.1	6.4	309.
4.5	686.	2271.	4.6	-3.7	5.9	309.
5.0	762.	2347.	3.4	-4.5	5.6	323.
5.5	838.	2423.	1.7	-4.5	4.8	340.
6.0	914.	2499.	0.3	-4.1	4.1	356.
6.5	991.	2576.	-0.1	-4.7	4.7	2.
7.0	1067.	2652.	-0.6	-4.6	4.6	7.
7.5	1143.	2728.	-1.4	-5.1	5.3	15.
8.0	1225.	2810.	-1.9	-6.8	7.1	16.
8.5	1302.	2887.	-3.6	-6.9	7.8	28.
9.0	1378.	2963.	-5.1	-7.9	9.4	33.
9.5	1454.	3039.	-6.3	-8.7	10.7	36.
10.0	1530.	3115.	-7.4	-9.9	12.4	37.
10.5	1606.	3191.	-8.4	-11.5	14.2	36.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

DATE 04/15/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		6.62		0.0		1.5	90.
1.0	150	1735	5.87	-0.75	-2.41	0.52	M	M
2.0	300	1885	4.64	-1.23	-1.11	1.81	M	M
2.7	415.	2000.	4.92	0.28	2.23	5.16	M	M
3.3	500	2085	5.05	0.13	-0.19	2.74	M	M
6.0	915.	2500.	3.50	-1.54	-1.68	1.25	M	M
9.2	1415.	3000.	1.79	-1.71	-1.69	1.23	M	M
15.8	2415.	4000.	-0.13	-1.92	-0.38	2.55		
22.3	3415.	5000.	-4.67	-4.54	-2.30	0.63		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

DATE 04/15/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	-0.0	1.5	90.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4495

DATE 04/17/77 TIME 05:36MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		0.83		0.0		1.5	180.
0.5	* 76	1661	0.74		1.13	4.06		
1.0	150	1735	1.40	0.57	1.69	4.62	5.7	165.
2.0	300	1885	1.79	0.39	2.81	5.74	2.7	192.
2.7	415.	2000.	4.64	2.65	4.84	7.77	3.5	228.
3.3	500	2085	5.45	1.02	2.04	4.97	4.0	248.
3.8	* 571	2156	5.68		1.86	4.78		
6.0	915.	2500.	6.52	0.87	1.85	4.77	1.0	283.
9.3	1415.	3000.	6.24	-0.09	-1.29	1.63	3.7	217.
15.8	2415.	4000.	1.03	-5.21	-0.75	2.18		
22.2	3415.	5000.	-4.96	-5.99	-2.68	0.25		
28.5	4415.	6000.	-11.46	-6.49	-2.34	0.59		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4495

DATE 04/17/77 TIME 05:36MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	1.5	1.5	180.
0.5	76.	1661.	-1.4	4.0	4.2	160.
1.0	152.	1737.	-1.4	5.5	5.7	165.
1.5	229.	1814.	-1.1	3.8	3.9	164.
2.0	305.	1890.	0.6	2.5	2.6	194.
2.5	381.	1966.	1.6	2.2	2.8	217.
3.0	457.	2042.	3.8	2.1	4.3	242.
3.5	533.	2118.	3.7	1.1	3.8	254.
4.0	610.	2195.	2.5	1.3	2.8	242.
4.5	686.	2271.	0.7	1.2	1.4	211.
5.0	762.	2347.	0.4	0.9	1.0	206.
5.5	838.	2423.	0.8	0.8	1.1	225.
6.0	914.	2499.	1.0	-0.2	1.0	283.
6.5	991.	2576.	1.0	-0.3	1.0	255.
7.0	1067.	2652.	1.4	0.8	1.6	241.
7.5	1143.	2728.	1.5	1.0	1.8	237.
8.0	1219.	2804.	1.5	2.0	2.5	218.
8.5	1295.	2880.	1.9	2.4	3.1	219.
9.0	1372.	2957.	2.2	2.8	3.6	218.
9.5	1448.	3033.	2.1	3.0	3.7	215.
10.0	1524.	3109.	2.5	2.4	3.5	226.
10.5	1600.	3185.	2.1	1.5	2.6	236.
11.0	1676.	3261.	1.6	0.6	1.7	251.
11.5	1753.	3338.	1.0	-0.0	1.0	272.
12.0	1829.	3414.	1.4	0.9	1.7	238.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4397

DATE 04/17/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.26		0.0		2.6	270.
1.0	150	1735	21.96	0.70	1.73	4.65	1.6	278.
1.8	300	1885	20.62	-1.33	-6.95	-4.02	1.9	324.
2.3	415.	2000.	18.61	-1.17	-4.01	-1.09	2.3	318.
2.6	500	2085	18.94	-0.51	-2.11	0.82	2.3	261.
5.0	915.	2500.	14.47	-3.62	-2.85	0.08	1.5	46.
8.2	1415.	3000.	12.74	-2.22	-0.18	2.75	3.5	213.
14.4	2415.	4000.	5.58	-7.51	-0.93	2.00		
20.8	3415.	5000.	-0.22	-5.81	-2.84	0.08		
26.7	4415.	6000.	-8.88	-8.66	-2.13	0.80		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4397

DATE 04/17/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	1.9	0.3	1.9	262.
1.0	152.	1737.	1.6	-0.5	1.6	278.
1.5	229.	1814.	0.9	-1.0	1.3	318.
2.0	304.	1890.	1.2	-1.9	2.3	328.
2.5	485.	2070.	1.0	-1.4	2.4	307.
3.0	583.	2168.	-0.1	-2.1	2.1	3.
3.5	672.	2257.	0.4	-0.7	0.8	331.
4.0	757.	2342.	0.3	-0.5	0.6	324.
4.5	833.	2418.	-0.9	-1.5	1.4	41.
5.0	910.	2495.	-1.1	-1.0	1.5	47.
5.5	1007.	2592.	-0.4	-0.9	1.0	26.
6.0	1083.	2668.	0.6	0.1	0.6	261.
6.5	1159.	2744.	2.6	2.0	3.2	232.
7.0	1235.	2820.	2.1	2.7	3.4	218.
7.5	1312.	2897.	1.9	2.9	3.4	214.
8.0	1388.	2973.	2.0	3.0	3.6	214.
8.5	1464.	3049.	1.8	2.8	3.4	212.
9.0	1540.	3125.	2.6	2.8	4.0	222.
9.5	1616.	3201.	2.0	2.8	3.5	216.
10.0	1693.	3278.	2.4	2.4	3.4	225.
10.5	1769.	3354.	2.7	2.4	3.7	228.
11.0	1845.	3430.	2.9	2.4	3.8	231.
11.5	1921.	3506.	3.5	2.3	4.2	236.
12.0	2007.	3592.	2.6	2.9	3.9	222.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4370

DATE 04/19/77 TIME 05:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.74		0.0		2.6	315.
1.0	150	1735	2.74	0.0	-0.19	2.74	3.7	313.
2.0	300	1885	2.18	-0.56	-0.94	1.99	4.3	333.
2.7	415.	2000.	1.50	-0.67	-2.06	0.86	3.2	338.
3.3	500	2085	1.52	0.01	-1.32	1.61	2.8	338.
6.0	915.	2500.	-0.90	-2.22	-1.71	1.22	5.7	25.
9.3	1415.	3000.	-2.63	-1.94	-2.48	0.45	M	M
15.3	2415.	4000.	-9.58	-6.94	-0.97	1.96		
21.8	3415.	5000.	-13.44	-3.87	0.39	3.32		
28.3	4415.	6000.	-16.84	-3.40	-1.78	1.15		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4370

DATE 04/19/77 TIME 05:31MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	-1.8	2.6	315.
0.5	76.	1661.	2.4	-1.1	2.6	294.
1.0	152.	1737.	2.7	-2.6	3.8	314.
1.5	229.	1814.	2.4	-3.7	4.4	327.
2.0	305.	1890.	1.9	-3.8	4.3	333.
2.5	381.	1966.	1.4	-3.1	3.4	336.
3.0	457.	2042.	1.0	-2.8	2.9	340.
3.5	533.	2118.	1.1	-2.5	2.7	337.
4.0	610.	2195.	0.4	-1.3	1.4	341.
4.5	686.	2271.	-0.4	-1.8	1.9	12.
5.0	762.	2347.	-1.5	-1.6	2.2	43.
5.5	838.	2423.	-2.0	-3.6	4.1	29.
6.0	914.	2499.	-2.4	-5.1	5.7	25.
6.5	991.	2576.	-2.4	-5.4	5.9	24.
7.0	1067.	2652.	-1.8	-5.9	6.2	17.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4392

DATE 04/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.49		0.0		4.6	90.
1.0	150	1735	7.85	-0.64	-1.65	1.28	5.6	93.
2.0	300	1885	8.48	0.64	-1.10	4.03	3.8	103.
2.7	415.	2000.	7.18	-0.74	-2.76	0.17	2.3	138.
3.2	500	2085	6.44	-1.30	-2.22	0.71	4.4	110.
5.4	915.	2500.	2.93	-3.50	-1.87	1.06	6.2	72.
8.5	1415.	3000.	0.83	-1.82	-1.70	1.23	10.4	26.
14.9	2415.	4000.	-2.05	-3.17	-1.52	1.40		
20.8	3415.	5000.	-8.29	-6.23	-4.46	-1.53		
25.9	4415.	6000.	-15.34	-7.05	-3.54	-0.61		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4392

DATE 04/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-4.6	-0.0	4.6	90.
0.5	76.	1661.	-5.0	-0.9	5.0	80.
1.0	152.	1737.	-5.6	0.3	5.6	93.
1.5	229.	1814.	-6.3	0.3	6.3	93.
2.0	305.	1890.	-3.6	0.8	3.7	103.
2.5	381.	1966.	-0.4	1.0	1.1	157.
3.0	471.	2056.	-3.9	1.1	4.1	106.
3.5	547.	2132.	-4.4	2.2	4.9	116.
4.0	623.	2208.	-2.8	0.4	2.8	97.
4.5	710.	2295.	-3.7	-1.0	3.9	75.
5.0	830.	2415.	-6.4	-1.5	6.6	77.
5.5	935.	2520.	-5.8	-2.1	6.1	70.
6.0	1011.	2596.	-5.7	-3.1	6.5	61.
6.5	1094.	2679.	-6.0	-5.5	8.2	48.
7.0	1180.	2765.	-5.2	-7.6	9.2	35.
7.5	1256.	2841.	-4.9	-8.0	9.4	31.
8.0	1333.	2918.	-4.7	-8.5	9.7	29.
8.5	1409.	2994.	-4.8	-9.3	10.5	27.
9.0	1485.	3070.	-3.2	-9.1	9.7	19.
9.5	1561.	3146.	-2.8	-9.6	10.0	16.
10.0	1637.	3222.	-1.3	-9.9	10.0	7.
10.5	1714.	3299.	-1.2	-9.8	9.8	7.
11.0	1790.	3375.	-0.6	-9.4	9.5	4.
11.5	1866.	3451.	-0.4	-10.3	10.3	2.
12.0	1942.	3527.	-0.5	-11.0	11.0	3.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/21/77 TIME 05:29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-2.05		0.0		3.1	135.
1.0	150	1735	-1.18	0.87	-0.38	2.55	5.2	140.
2.0	300	1885	-0.41	0.77	1.14	4.06	4.9	135.
2.7	415.	2000.	0.64	0.28	3.39	6.32	4.8	143.
3.3	500	2085	1.57	1.69	3.20	6.13	4.6	135.
4.8	* 723	2308	3.79		1.31	4.24		
6.0	915.	2500.	3.60	2.04	-0.56	2.37	1.6	173.
9.3	1415.	3000.	2.74	-0.87	-0.56	2.37	3.0	162.
15.8	2415.	4000.	-1.67	-4.41	-0.95	1.98		
22.3	3415.	5000.	-7.12	-5.45	-2.32	0.61		
28.9	4415.	6000.	-11.55	-4.44	-1.17	1.76		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4391

DATE 04/21/77 TIME 05:29MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-3.7	4.0	5.4	138.
1.0	152.	1737.	-3.3	4.0	5.2	140.
1.5	229.	1814.	-3.0	4.0	5.1	143.
2.0	305.	1890.	-3.5	3.4	4.9	134.
2.5	381.	1966.	-3.0	3.8	4.8	141.
3.0	457.	2042.	-2.7	3.9	4.7	145.
3.5	533.	2118.	-3.6	2.8	4.5	128.
4.0	610.	2195.	-1.2	0.1	1.2	96.
4.5	686.	2271.	-0.9	0.0	0.9	92.
5.0	762.	2347.	-0.3	-0.2	0.3	52.
5.5	838.	2423.	-0.8	0.6	1.0	126.
6.0	914.	2499.	-0.2	1.6	1.6	173.
6.5	991.	2576.	-1.3	1.7	2.2	144.
7.0	1067.	2652.	-1.9	2.0	2.7	136.
7.5	1143.	2728.	-4.2	0.5	4.3	96.
8.0	1219.	2804.	-3.2	1.3	3.5	111.
8.5	1295.	2880.	-2.3	2.3	3.3	135.
9.0	1372.	2957.	-1.4	2.6	2.9	152.
9.5	1448.	3033.	-0.6	3.0	3.1	169.
10.0	1524.	3109.	0.2	2.9	2.9	185.
10.5	1600.	3185.	1.2	3.2	3.4	201.
11.0	1676.	3261.	1.0	3.3	3.4	197.
11.5	1753.	3338.	1.0	3.0	3.2	198.
12.0	1829.	3414.	1.1	3.2	3.3	199.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4396

DATE 04/21/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		19.32		0.0		4.1	270.
1.0	150	1735	19.84	0.52	0.0	2.93	2.0	306.
1.8	300	1885	17.66	-2.19	-4.75	-1.82	2.6	303.
2.3	415.	2000.	16.64	-0.98	-1.77	1.16	3.0	306.
2.8	500	2085	16.66	-0.02	-1.60	1.33	2.7	307.
5.1	915.	2500.	12.09	-4.18	-1.80	1.12	4.7	304.
8.1	1415.	3000.	7.55	-4.43	-5.33	-2.40	5.0	252.
14.1	2415.	4000.	2.65	-5.39	-1.12	1.81		
20.5	3415.	5000.	-3.22	-5.87	-0.76	2.16		
26.7	4415.	6000.	-8.98	-5.77	-0.39	2.54		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4396

DATE 04/21/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.1	0.0	4.1	270.
0.5	76.	1661.	2.0	-0.3	2.0	278.
1.0	152.	1737.	1.6	-1.5	2.0	307.
1.5	229.	1814.	1.6	-0.7	1.7	293.
2.0	353.	1938.	2.6	-2.1	3.3	309.
2.5	452.	2037.	2.4	-1.6	2.8	303.
3.0	528.	2113.	2.0	-1.6	2.6	308.
3.5	613.	2198.	1.9	-2.6	3.2	324.
4.0	711.	2296.	4.0	-3.1	5.0	308.
4.5	810.	2395.	4.4	-2.9	5.3	303.
5.0	902.	2487.	4.1	-2.7	4.9	303.
5.5	985.	2570.	2.8	-2.1	3.5	307.
6.0	1062.	2647.	1.7	0.1	1.7	265.
6.5	1139.	2724.	2.2	1.7	2.8	231.
7.0	1215.	2800.	4.4	2.2	5.0	244.
7.5	1296.	2881.	3.8	1.5	4.1	248.
8.0	1390.	2975.	4.6	1.7	4.9	250.
8.5	1490.	3075.	5.0	0.9	5.0	259.
9.0	1596.	3181.	7.0	1.4	7.2	258.
9.5	1687.	3272.	5.3	3.2	6.2	239.
10.0	1786.	3371.	5.6	3.7	6.7	237.
10.5	1862.	3447.	4.9	4.2	6.4	229.
11.0	1939.	3524.	4.8	5.2	7.1	223.
11.5	2015.	3600.	4.6	5.7	7.4	219.
12.0	2091.	3676.	4.4	6.7	8.0	213.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4382

DATE 04/23/77 TIME 05:28MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		1.98		0.0		3.1	135.
1.0	150	1735	6.41	4.43	5.18	8.11	4.0	137.
2.0	300	1885	8.85	2.43	4.40	7.33	0.5	217.
2.5	* 380	1965	9.51		0.91	3.84		
2.7	415.	2000.	9.32	0.48	-1.10	1.83	1.2	93.
3.3	500	2085	8.96	-0.37	-0.73	2.20	1.7	70.
6.0	915.	2500.	10.34	1.12	-0.55	2.38	3.6	55.
9.3	1415.	3000.	8.95	-1.12	-1.83	1.10	5.3	95.
15.8	2415.	4000.	2.27	-6.68	-2.06	0.86		
22.2	3415.	5000.	-4.77	-7.04	-3.84	-0.91		
28.2	4415.	6000.	-12.75	-7.98	-4.31	-1.38		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4382

DATE 04/23/77 TIME 05:28MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-2.2	4.0	4.5	151.
1.0	152.	1737.	-2.8	2.9	4.0	136.
1.5	229.	1814.	-0.7	1.7	1.8	157.
2.0	305.	1890.	0.3	0.3	0.4	221.
2.5	381.	1966.	1.0	0.8	1.3	127.
3.0	457.	2042.	0.9	-0.7	1.2	51.
3.5	533.	2118.	-2.1	-0.2	2.1	84.
4.0	610.	2195.	-2.7	-1.1	3.0	68.
4.5	686.	2271.	-5.4	-2.1	5.8	69.
5.0	762.	2347.	-6.6	-2.8	7.1	67.
5.5	838.	2423.	-5.4	-1.9	5.7	71.
6.0	914.	2499.	-2.9	-2.1	3.6	55.
6.5	991.	2576.	-2.7	-2.1	3.4	52.
7.0	1067.	2652.	-3.4	-1.0	3.6	73.
7.5	1143.	2728.	-4.2	-0.2	4.2	88.
8.0	1219.	2804.	-4.9	1.0	5.0	101.
8.5	1295.	2880.	-5.8	1.5	6.0	105.
9.0	1372.	2957.	-5.3	0.6	5.3	96.
9.5	1448.	3033.	-5.2	0.4	5.2	95.
10.0	1524.	3109.	-5.0	-0.2	5.0	88.
10.5	1600.	3185.	-4.8	-0.6	4.9	83.
11.0	1676.	3261.	-5.1	-1.0	5.2	79.
11.5	1753.	3338.	-4.6	-1.5	4.9	72.
12.0	1829.	3414.	-5.0	-2.1	5.4	67.

UTAH UAIIB ELEV 1585 METERS SOUNDING ID 4384

DATE 04/23/77 TIME 13:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.79		0.0		3.6	315.
1.0	150	1736	20.22	-1.57	-1.04	1.89	3.5	334.
2.0	300	1885	19.58	-0.64	-2.09	0.84	5.2	296.
2.7	415.	2000.	18.32	-0.70	-0.52	2.40	4.5	298.
3.3	500	2085	19.04	0.16	-2.10	0.83	4.1	315.
5.9	915.	2500.	15.01	-3.99	-5.34	-2.42	3.1	5.
8.7	1415.	3000.	11.91	-3.23	-3.26	-0.34	6.7	27.
15.1	2415.	4000.	6.44	-5.38	-0.74	2.19		
20.1	3415.	5000.	-2.63	-9.06	-5.13	-2.20		
24.5	4415.	6000.	-9.57	-6.94	-2.33	0.60		

DATE 04/23/77 TIME 13:45MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1586.	2.6	-2.5	3.6	315.
0.5	76.	1661.	0.8	-1.5	1.5	330.
1.0	154.	1739.	1.5	-3.2	3.6	335.
1.5	230.	1815.	3.2	-2.9	4.3	312.
2.0	306.	1891.	4.8	-2.2	5.3	294.
2.5	382.	1967.	4.3	-1.4	4.6	288.
3.0	459.	2044.	3.2	-3.0	4.4	313.
3.5	535.	2120.	2.6	-2.7	3.8	316.
4.0	611.	2196.	2.8	-1.9	3.4	303.
4.5	687.	2272.	0.8	-1.3	1.5	327.
5.0	763.	2348.	0.3	-1.8	1.9	352.
5.5	840.	2425.	-0.3	-2.2	2.2	8.
6.0	943.	2528.	-0.2	-3.4	3.4	4.
6.5	1070.	2655.	-0.1	-4.2	4.2	359.
7.0	1149.	2734.	-0.2	-6.6	7.8	32.
7.5	1225.	2810.	-0.1	-6.5	7.7	32.
8.0	1302.	2887.	-0.2	-6.1	7.4	34.
8.5	1378.	2963.	-0.1	-5.9	6.7	27.
9.0	1454.	3039.	-0.0	-6.0	6.7	26.
9.5	1535.	3120.	-0.6	-5.4	6.0	26.
10.0	1614.	3199.	-1.2	-5.2	5.3	13.
10.5	1690.	3275.	-0.2	-4.3	4.3	2.
11.0	1777.	3362.	-0.6	-4.6	4.6	8.
11.5	1855.	3440.	-1.5	-5.2	5.4	16.
12.0	1931.	3516.	-1.3	-4.9	5.1	15.

UTAH UAUB FLEV 1585 METERS SOUNDING ID 4386

DATE 04/25/77 TIME 05:25MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		6.52		0.0		2.1	135.
1.0	150	1736	10.51	3.99	4.02	6.95	3.9	161.
1.0	* 152	1737	10.53		4.02	6.95		
2.0	300	1885	10.98	0.47	1.09	4.02	2.4	191.
2.7	415.	2000.	10.99	0.19	-0.91	2.02	3.3	191.
3.3	500	2085	10.62	-0.55	-1.45	1.47	3.6	183.
6.0	915.	2500.	11.08	0.47	0.0	2.93	1.9	262.
9.3	1415.	3000.	9.79	-1.30	-1.82	1.10	4.6	173.
15.8	2415.	4000.	3.31	-6.48	-2.62	0.31		
22.4	3415.	5000.	-3.53	-5.85	-3.24	-0.31		

UTAH UAUB FLEV 1585 METERS SOUNDING ID 4386

DATE 04/25/77 TIME 05:25MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-0.8	3.3	3.4	167.
1.0	152.	1737.	-1.3	3.7	3.9	160.
1.5	229.	1814.	-0.2	2.2	2.2	175.
2.0	305.	1890.	0.5	2.4	2.4	192.
2.5	381.	1966.	0.6	3.3	3.3	190.
3.0	457.	2042.	0.6	3.2	3.3	191.
3.5	533.	2118.	-0.2	3.9	3.9	177.
4.0	610.	2195.	-1.4	4.2	4.4	162.
4.5	686.	2271.	-1.4	2.1	2.5	146.
5.0	762.	2347.	-1.4	-0.0	1.4	89.
5.5	838.	2423.	0.1	0.0	0.1	257.
6.0	914.	2499.	1.9	0.3	1.9	262.
6.5	991.	2576.	2.1	0.2	2.1	264.
7.0	1067.	2652.	0.3	1.0	1.1	198.
7.5	1143.	2728.	-2.4	2.4	3.4	135.
8.0	1219.	2804.	-2.8	2.8	4.0	135.
8.5	1295.	2880.	-1.9	3.4	3.9	151.
9.0	1372.	2957.	-0.8	4.3	4.4	170.
9.5	1448.	3033.	-0.4	4.7	4.7	175.
10.0	1524.	3109.	0.3	4.8	4.9	184.
10.5	1600.	3185.	1.0	4.6	4.7	192.
11.0	1676.	3261.	0.8	4.1	4.2	192.
11.5	1753.	3338.	-0.2	3.5	3.5	177.
12.0	1829.	3414.	-0.2	3.3	3.3	176.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4388

DATE 04/25/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MTN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.66		0.0		3.1	270.
0.8	150	1735	20.26	-2.41	-1.73	1.19	5.4	270.
1.7	300	1885	19.32	-0.94	-1.39	1.53	7.1	277.
2.5	415.	2000.	19.58	0.74	-0.35	2.58	8.9	283.
3.1	500	2085	19.33	-0.73	-0.87	2.05	9.2	276.
5.8	915.	2500.	17.80	-1.51	-1.41	1.52	4.4	272.
9.1	1415.	3000.	14.92	-2.80	-1.78	1.15	4.5	300.
15.5	2415.	4000.	8.33	-5.70	-1.83	1.10		
21.5	3415.	5000.	4.26	-5.07	-0.19	2.74		
28.0	4415.	6000.	3.97	-0.29	-0.93	2.00		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4388

DATE 04/25/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MTN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	3.1	0.0	3.1	270.
0.5	76.	1661.	3.3	0.1	3.3	269.
1.0	186.	1771.	6.4	-0.1	6.4	271.
1.5	262.	1847.	6.4	-0.3	6.4	273.
2.0	338.	1923.	7.7	-1.6	7.9	282.
2.5	415.	2000.	8.7	-1.9	8.9	283.
3.0	491.	2076.	9.6	-1.5	9.7	279.
3.5	567.	2152.	5.3	1.4	5.5	255.
4.0	643.	2228.	3.8	-0.8	3.8	271.
4.5	719.	2304.	2.5	-3.5	4.3	325.
5.0	796.	2381.	3.6	-3.0	4.7	309.
5.5	872.	2457.	4.4	-0.4	4.4	275.
6.0	948.	2533.	4.3	0.1	4.3	269.
6.5	1024.	2609.	3.3	0.5	3.3	262.
7.0	1100.	2685.	0.8	0.5	1.0	240.
7.5	1177.	2762.	1.4	-0.6	1.5	293.
8.0	1253.	2838.	1.8	-0.8	1.9	293.
8.5	1329.	2914.	4.4	-2.0	4.8	295.
9.0	1405.	2990.	4.0	-2.4	4.6	301.
9.5	1482.	3067.	3.1	-1.3	3.4	293.
10.0	1558.	3143.	3.9	-0.5	4.0	277.
10.5	1634.	3219.	4.3	-0.2	4.3	273.
11.0	1710.	3295.	4.7	-0.4	4.7	275.
11.5	1794.	3379.	5.0	-0.9	5.1	281.
12.0	1870.	3455.	4.6	-1.4	4.8	287.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4383

DATE 04/27/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		13.83		0.0		2.6	225.
1.0	150	1735	13.83	0.0	0.18	3.11	M	M
2.0	300	1885	13.92	0.09	0.18	3.11	M	M
2.7	415.	2000.	14.01	0.09	-0.36	2.57	M	M
3.3	500	2085	13.83	-0.18	-1.26	1.67	M	M
6.0	915.	2500.	10.64	-3.19	-2.73	0.20	M	M
9.2	1415.	3000.	6.24	-4.40	-2.77	0.16	M	M
15.8	2415.	4000.	-0.99	-7.23	-2.66	0.27		
21.9	3415.	5000.	-9.87	-8.88	-3.31	-0.38		
28.3	4415.	6000.	-18.35	-8.48	-0.79	2.14		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4383

DATE 04/27/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	1.8	2.6	225.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4385

DATE 04/27/77 TIME 12:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		23.62		0.0		3.1	135.
1.0	150	1735	22.49	-1.13	-1.55	1.38	2.5	151.
1.9	300	1885	21.01	-1.48	-3.11	-0.18	4.6	149.
2.7	415.	2000.	20.12	-0.80	-2.61	0.31	5.1	164.
3.2	500	2085	19.94	-0.27	-3.32	-0.39	5.6	169.
5.9	915.	2500.	17.36	-2.59	0.88	3.81	9.4	189.
9.2	1415.	3000.	16.28	-0.71	-1.06	1.86	17.1	199.
15.6	2415.	4000.	13.56	-3.08	-2.33	0.60		
22.2	3415.	5000.	8.49	-5.07	-1.10	1.83		
28.7	4415.	6000.	5.39	-3.09	1.11	4.04		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4385

DATE 04/27/77 TIME 12:54MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-1.0	1.8	2.1	151.
1.0	152.	1737.	-1.2	2.2	2.6	151.
1.5	229.	1814.	-1.9	3.5	4.0	152.
2.0	308.	1893.	-2.5	4.0	4.7	149.
2.5	386.	1971.	-1.6	4.4	4.7	160.
3.0	462.	2047.	-1.0	5.6	5.7	170.
3.5	542.	2127.	-1.1	5.5	5.6	169.
4.0	627.	2212.	-1.8	5.0	5.3	160.
4.5	703.	2288.	-1.7	5.6	5.9	163.
5.0	779.	2364.	-1.4	5.5	5.6	166.
5.5	855.	2440.	1.3	6.9	7.0	191.
6.0	932.	2517.	1.4	10.0	10.1	188.
6.5	1008.	2593.	1.4	10.3	10.4	188.
7.0	1084.	2669.	4.2	10.7	11.5	202.
7.5	1160.	2745.	4.4	9.8	10.7	204.
8.0	1236.	2821.	4.4	10.3	11.2	203.
8.5	1313.	2898.	5.6	12.2	13.4	205.
9.0	1389.	2974.	5.4	16.2	17.1	198.
9.5	1465.	3050.	5.5	16.3	17.2	199.
10.0	1541.	3126.	6.0	13.5	14.7	204.
10.5	1617.	3202.	7.0	10.0	12.2	215.
11.0	1694.	3279.	7.7	11.3	13.7	214.
11.5	1770.	3355.	7.7	17.1	18.8	204.
12.0	1846.	3431.	7.7	15.9	17.7	206.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4387

DATE 04/29/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		4.64		0.0		2.6	135.
0.3	* 38	1623	4.54		0.0	0.0		
1.0	150	1735	6.23	1.59	5.73	8.66	3.8	133.
1.8	* 266	1851	8.95		4.23	7.16		
2.0	300	1885	8.95	2.72	1.84	4.76	1.4	162.
2.7	415.	2000.	8.30	-0.46	-0.73	2.19	0.4	160.
3.3	500	2085	8.21	-0.27	-1.10	1.83	1.1	153.
6.0	915.	2500.	6.71	-1.40	-0.18	2.74	1.8	200.
9.3	1415.	3000.	4.73	-2.07	-1.67	1.25	3.6	241.
15.8	2415.	4000.	0.83	-3.90	-1.13	1.80		
22.3	3415.	5000.	-5.16	-5.99	-1.53	1.39		
28.8	4415.	6000.	-11.26	-6.10	-0.78	2.15		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4387

DATE 04/29/77 TIME 04:21MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-2.4	2.2	3.3	132.
1.0	152.	1737.	-2.8	2.6	3.8	133.
1.5	229.	1814.	-0.7	2.2	2.3	161.
2.0	305.	1890.	-0.4	1.3	1.3	162.
2.5	381.	1966.	-0.1	0.3	0.3	162.
3.0	457.	2042.	-0.2	0.4	0.4	159.
3.5	533.	2118.	-0.9	1.4	1.6	148.
4.0	610.	2195.	-0.3	0.9	0.9	163.
4.5	686.	2271.	0.2	1.1	1.1	190.
5.0	762.	2347.	0.4	0.9	1.0	207.
5.5	838.	2423.	0.8	0.8	1.2	228.
6.0	914.	2499.	0.6	1.6	1.7	200.
6.5	991.	2576.	0.7	2.2	2.3	199.
7.0	1067.	2652.	1.0	1.7	1.9	210.
7.5	1143.	2728.	1.8	1.3	2.2	233.
8.0	1219.	2804.	1.6	1.6	2.3	225.
8.5	1295.	2880.	2.1	1.4	2.5	237.
9.0	1372.	2957.	3.0	1.7	3.4	241.
9.5	1448.	3033.	3.3	1.8	3.7	242.
10.0	1524.	3109.	3.2	1.5	3.5	245.
10.5	1600.	3185.	3.1	1.4	3.4	245.
11.0	1676.	3261.	3.3	1.7	3.7	242.
11.5	1753.	3338.	3.5	1.8	4.0	243.
12.0	1829.	3414.	3.7	2.1	4.3	240.

UTAH UAUH ELEV 1585 METERS SOUNDING ID 4389

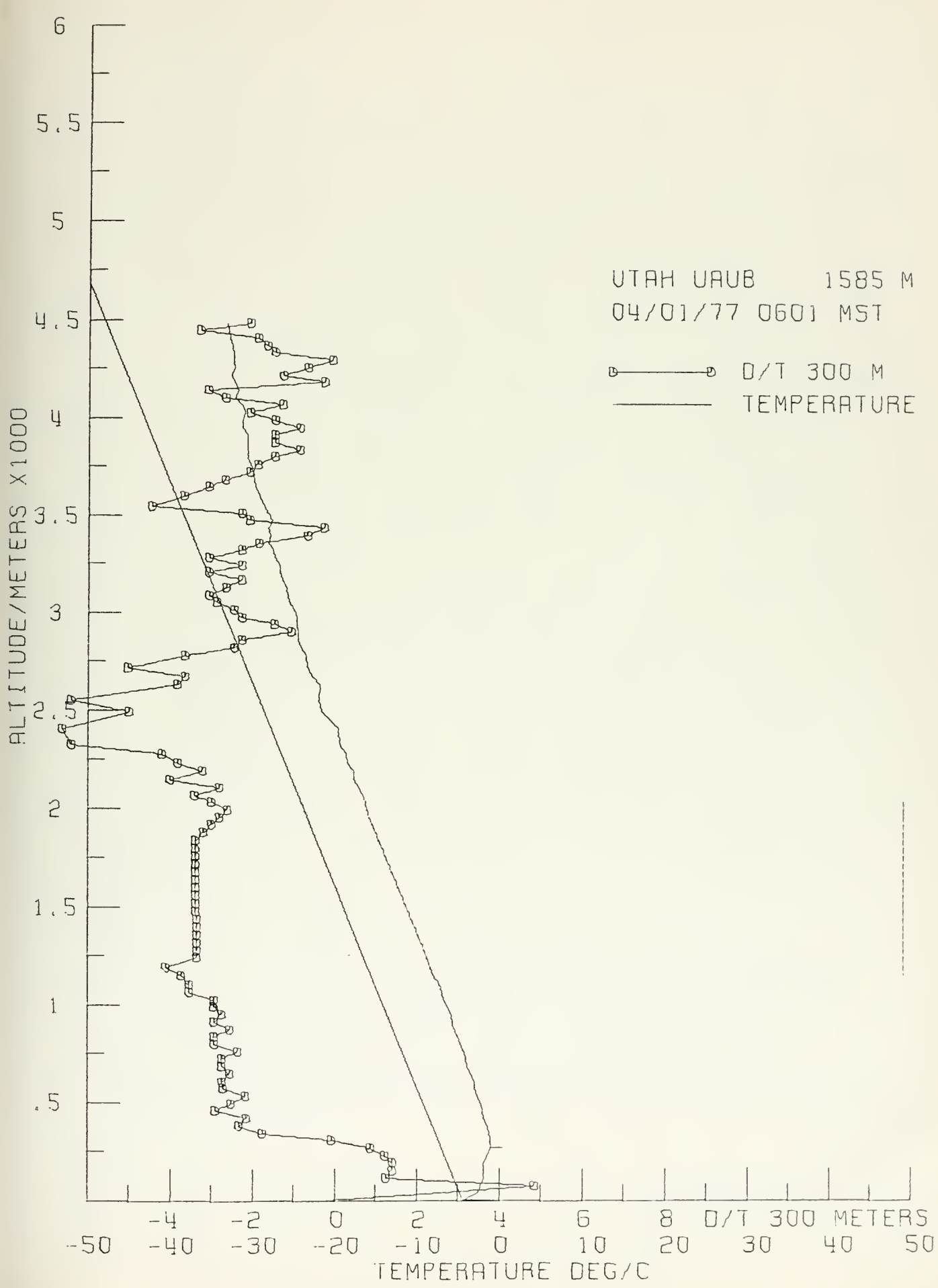
DATE 04/29/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

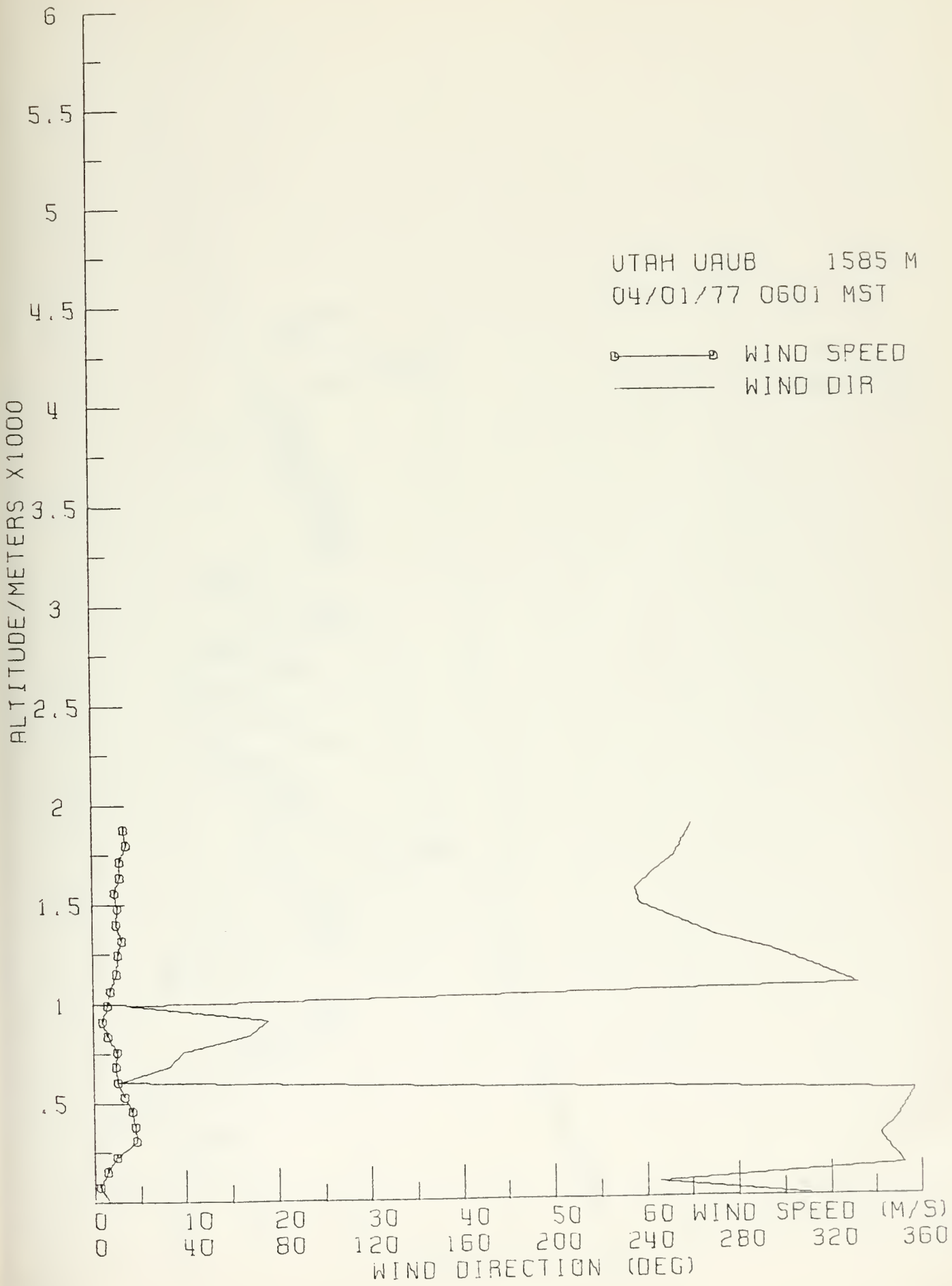
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.44		0.0		3.1	225.
1.0	150	1735	21.44	0.01	-1.56	1.37	2.5	258.
2.0	300	1885	20.30	-1.15	-2.78	0.15	5.6	245.
2.7	415.	2000.	19.50	-0.98	-1.40	1.53	5.7	248.
3.3	500	2085	18.81	-0.51	-1.92	1.00	6.8	246.
6.0	915.	2500.	18.43	-0.04	0.0	2.93	11.1	252.
9.3	1415.	3000.	18.43	-0.34	0.0	2.93	7.1	231.
15.8	2415.	4000.	16.54	-1.89	-0.53	2.40		
22.4	3415.	5000.	12.09	-4.45	-0.36	2.57		
28.4	4415.	6000.	5.21	-6.89	-3.71	-0.78		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4389

DATE 04/29/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.2	2.2	3.1	225.
0.5	76.	1661.	0.9	2.3	2.5	201.
1.0	152.	1737.	2.4	0.4	2.5	260.
1.5	229.	1814.	4.2	1.5	4.5	250.
2.0	305.	1890.	5.2	2.4	5.7	245.
2.5	381.	1966.	5.3	2.3	5.8	246.
3.0	457.	2042.	5.3	1.9	5.6	250.
3.5	533.	2118.	7.1	3.2	7.8	246.
4.0	610.	2195.	7.0	3.5	7.9	244.
4.5	686.	2271.	8.1	3.6	8.9	246.
5.0	762.	2347.	9.9	3.1	10.3	253.
5.5	838.	2423.	9.7	4.1	10.5	247.
6.0	914.	2499.	10.6	3.4	11.1	252.
6.5	991.	2576.	11.7	4.0	12.4	251.
7.0	1067.	2652.	11.9	4.1	12.6	251.
7.5	1143.	2728.	12.9	1.4	12.9	264.
8.0	1219.	2804.	11.4	3.5	11.9	253.
8.5	1295.	2880.	10.4	5.6	11.9	242.
9.0	1372.	2957.	7.3	4.4	8.6	239.
9.5	1448.	3033.	4.2	4.3	6.0	224.
10.0	1524.	3109.	5.7	2.6	6.2	245.


UTAH UAUB 1585 M
04/01/77 0601 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C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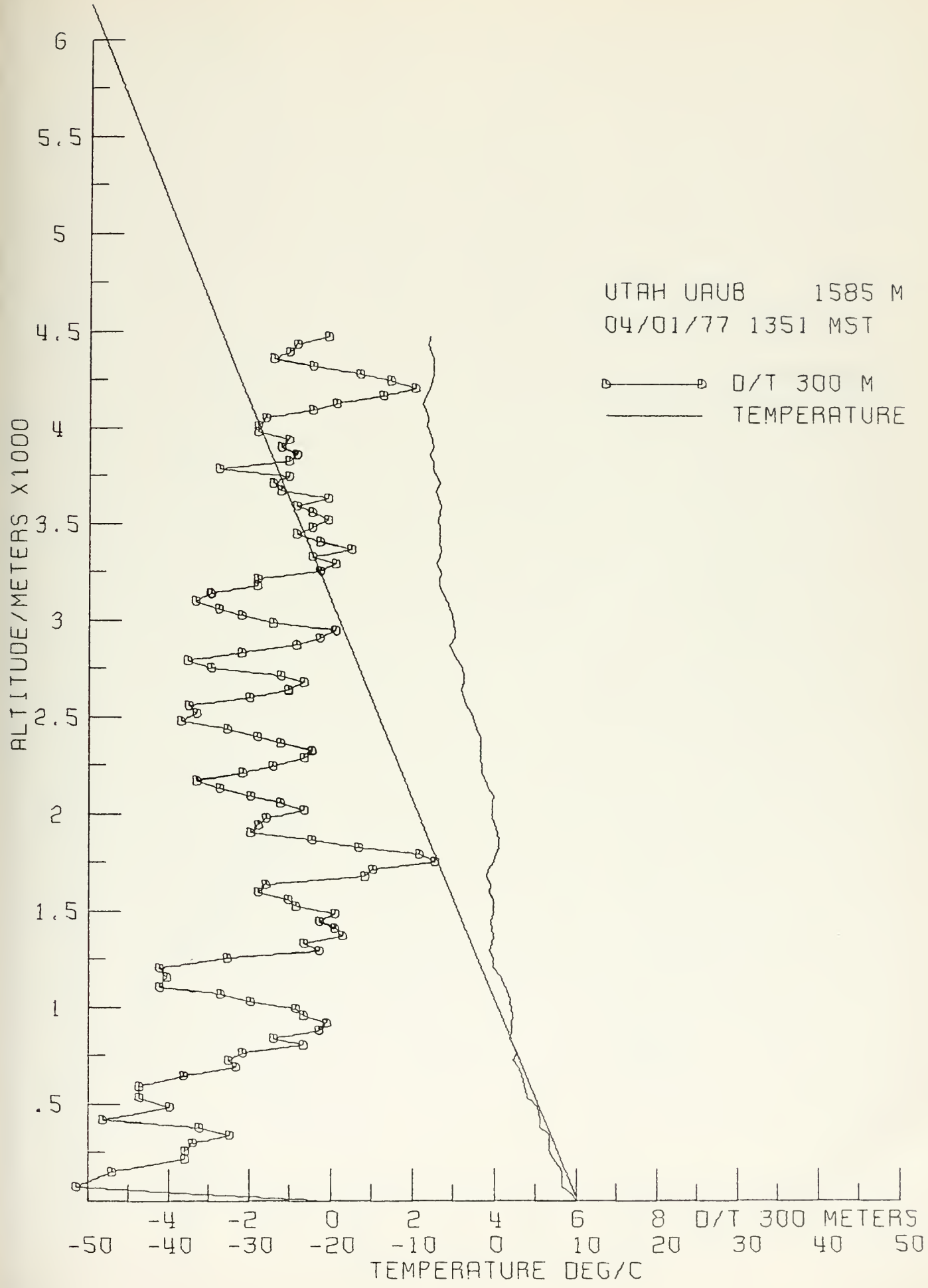
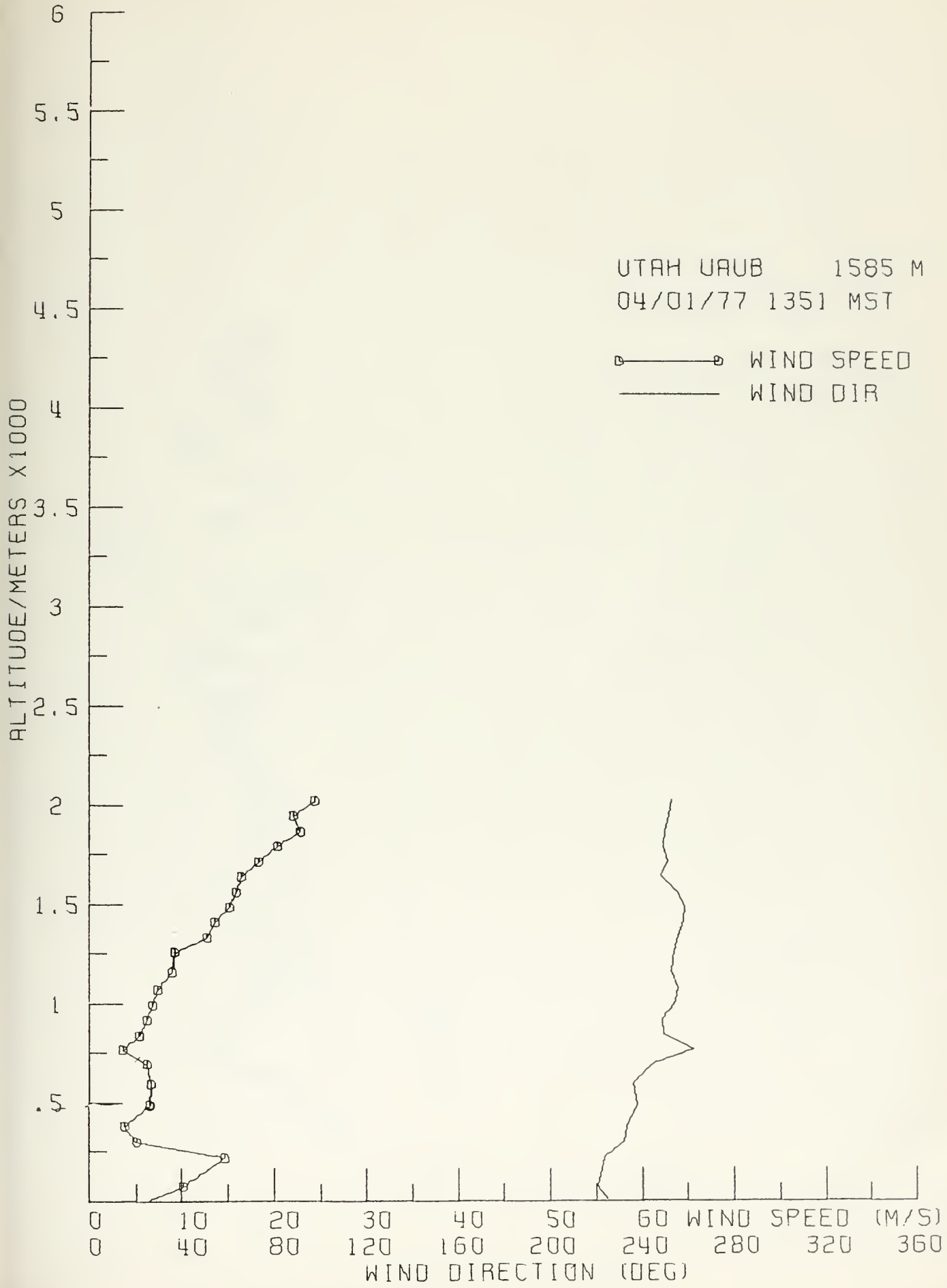
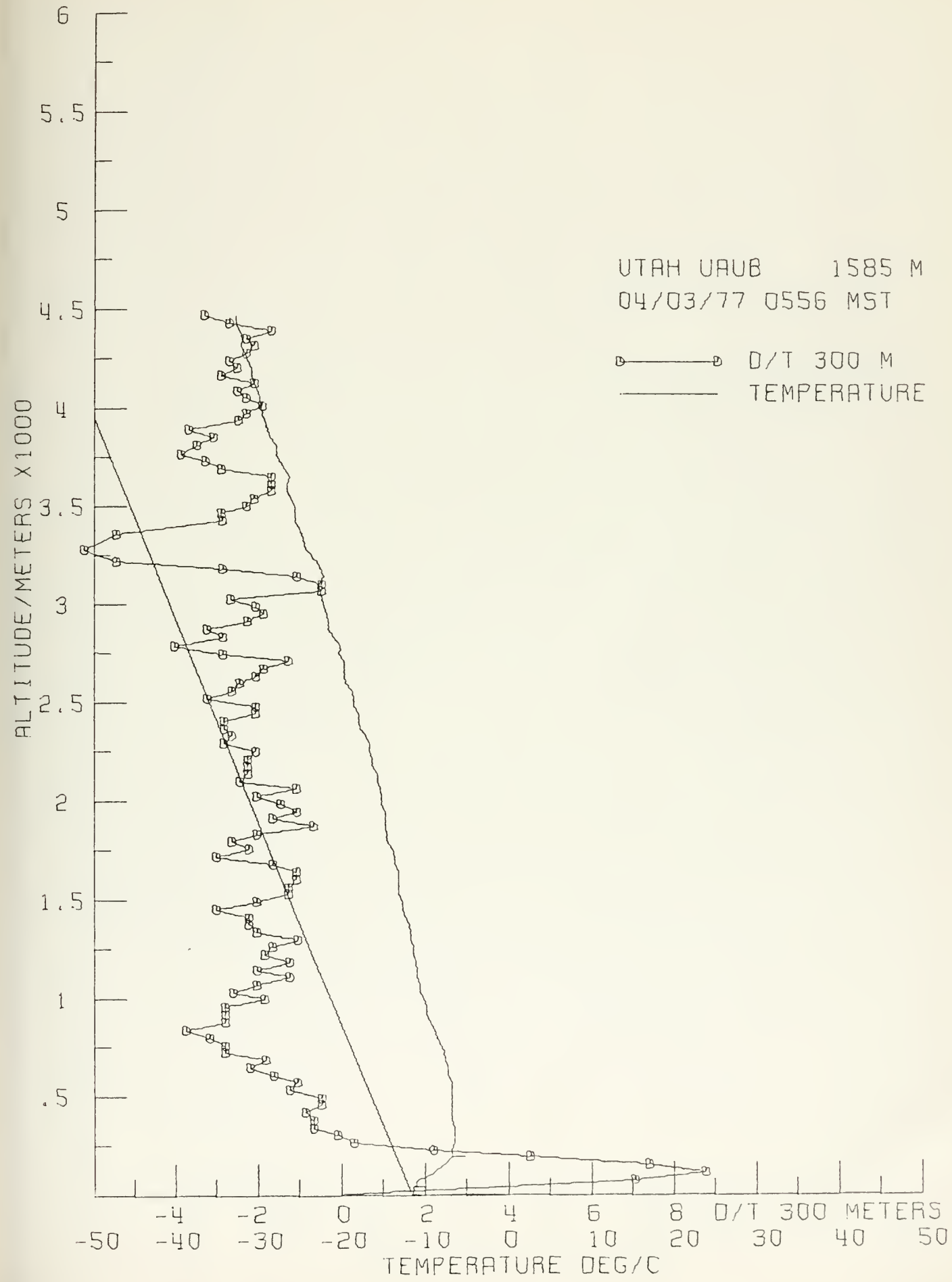
04/01/77 0601 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/01/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/01/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/03/77 0556 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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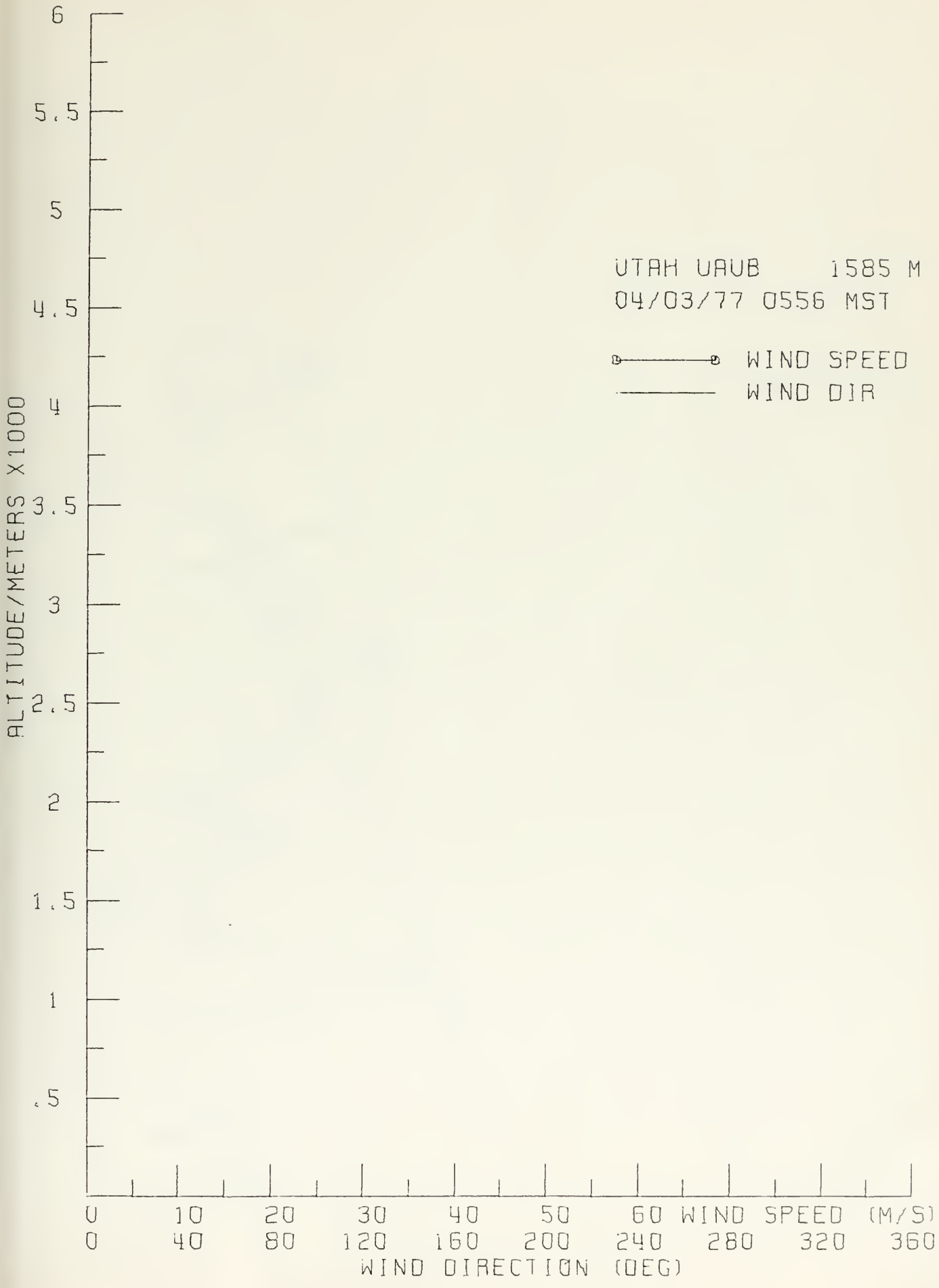
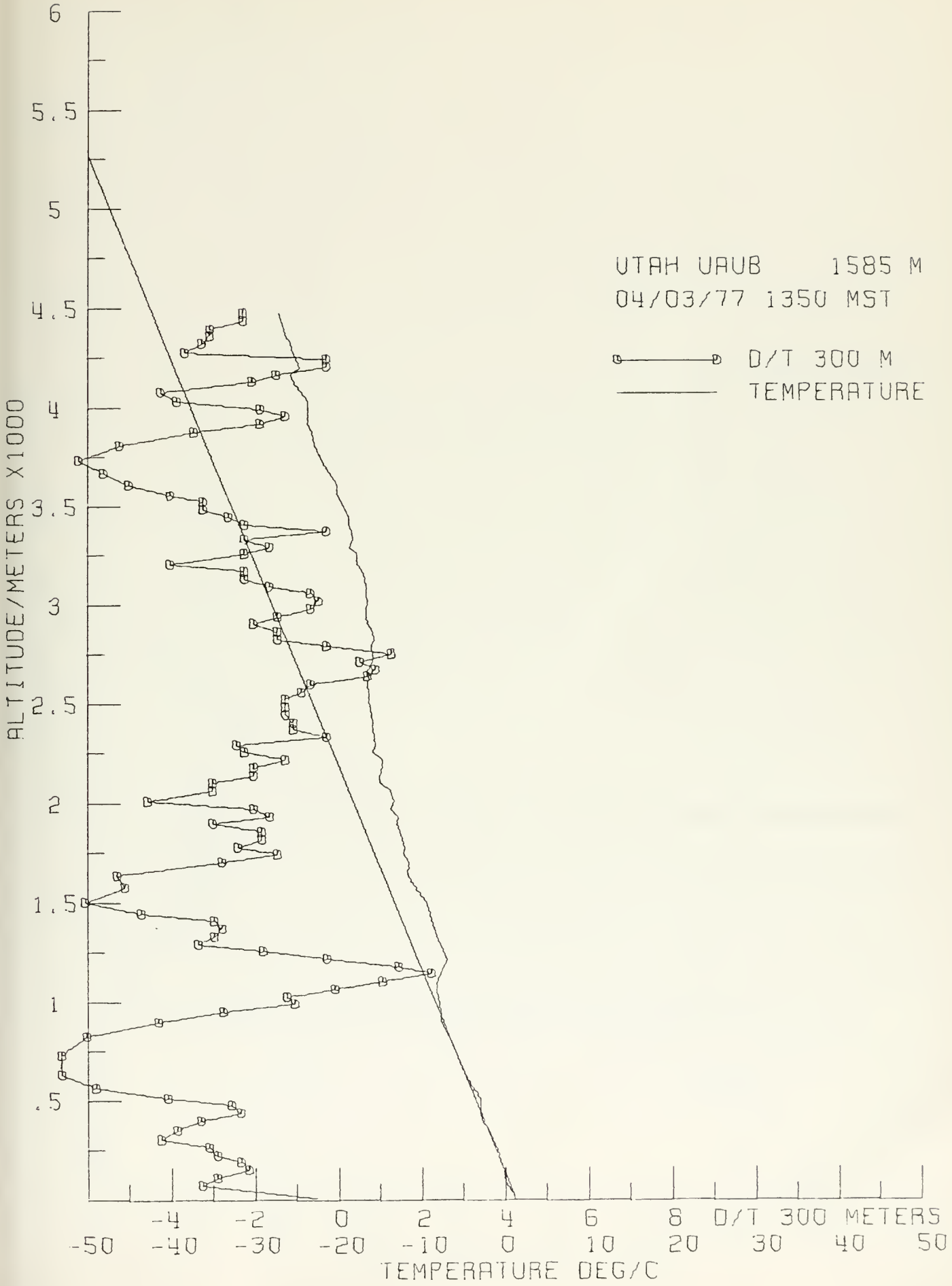
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/03/77 0556 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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04/03/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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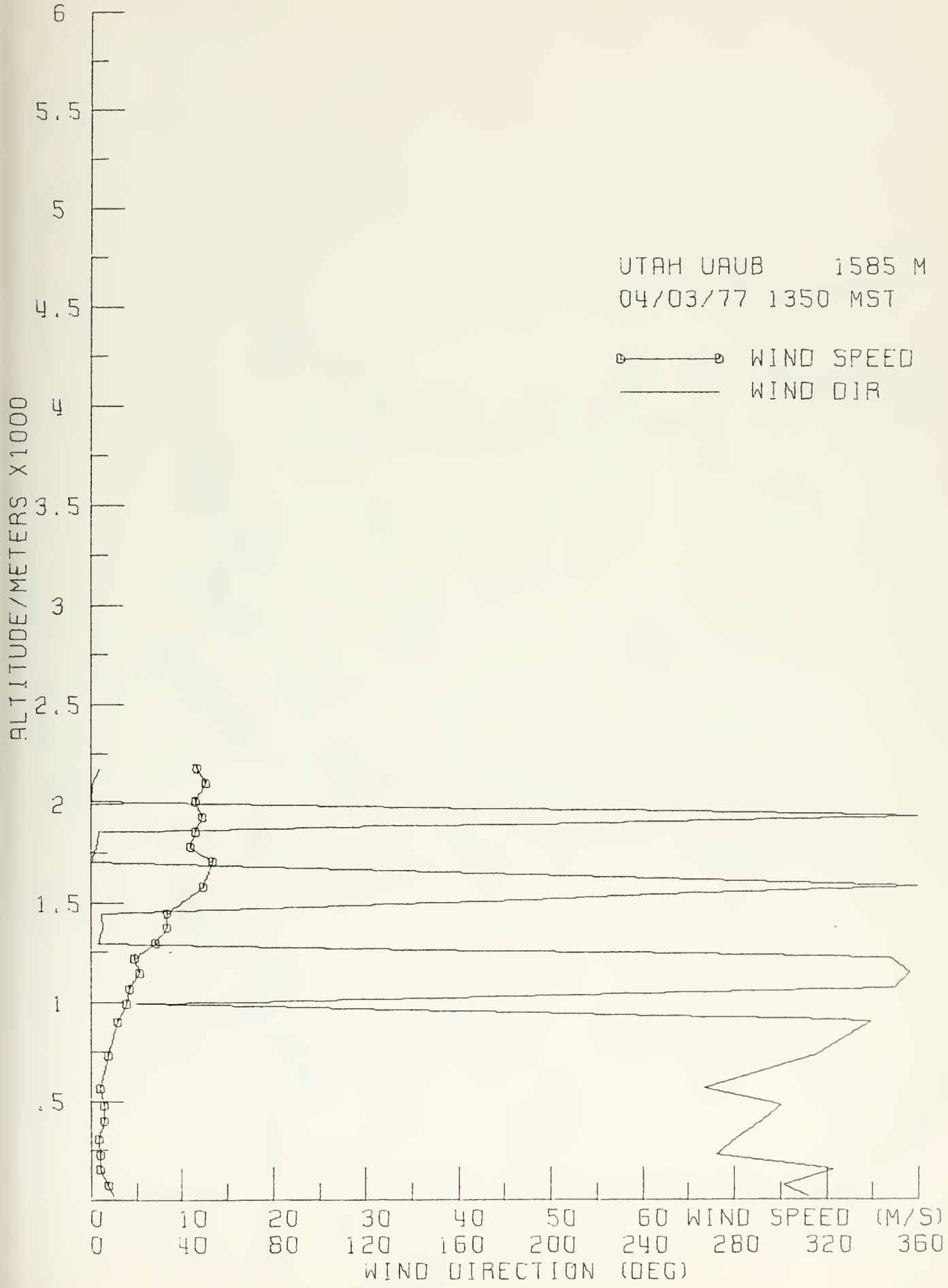
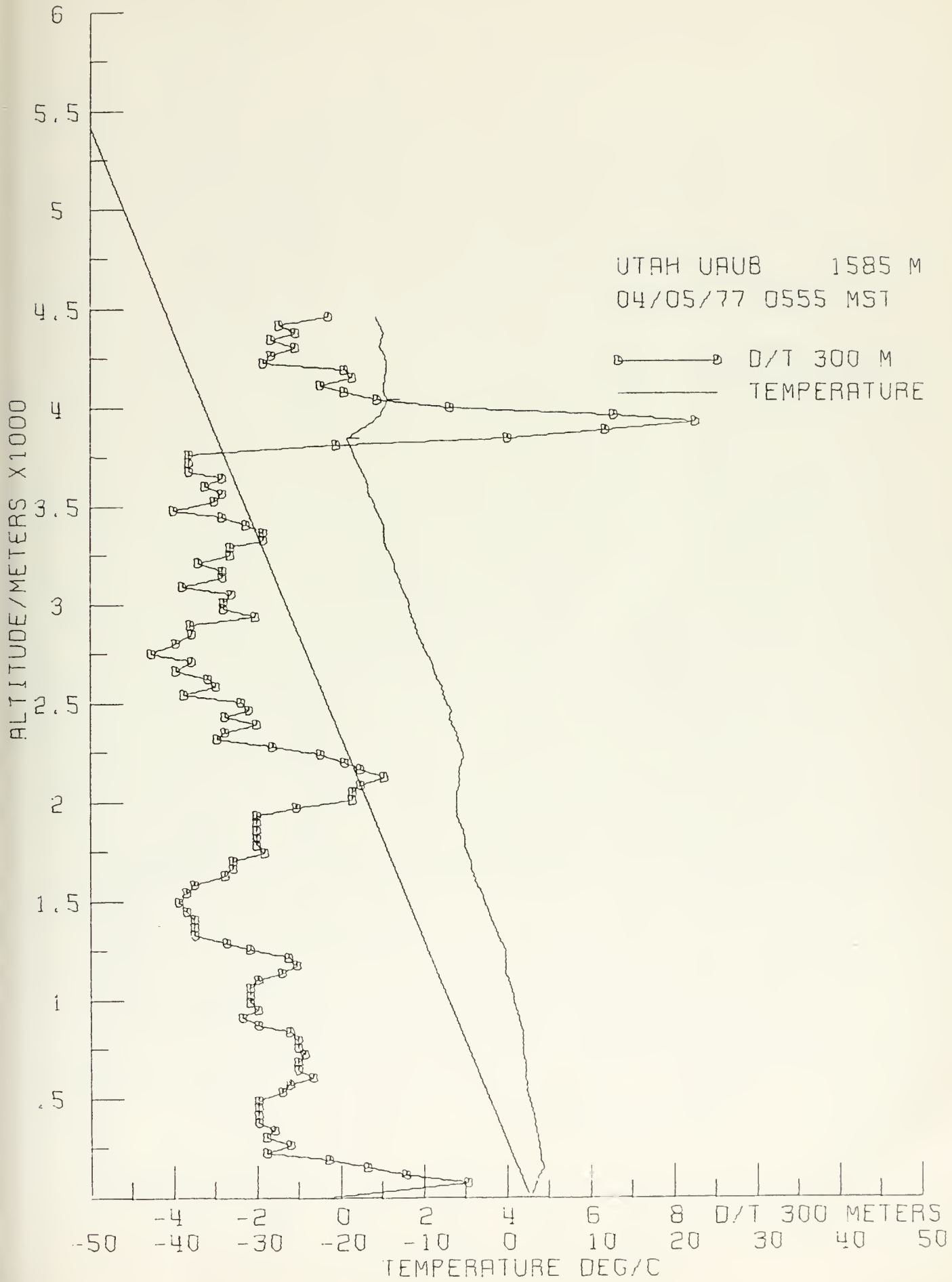
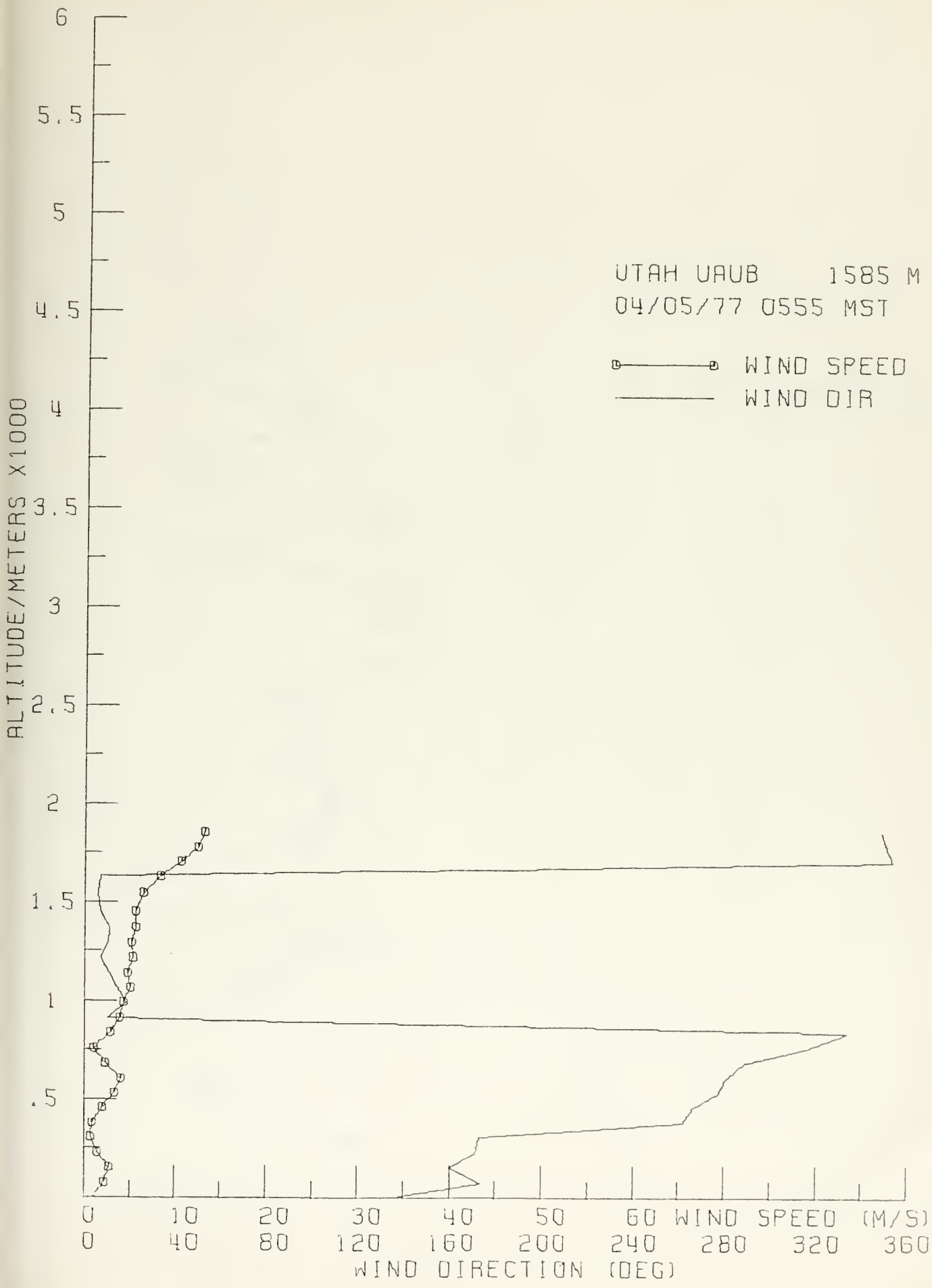
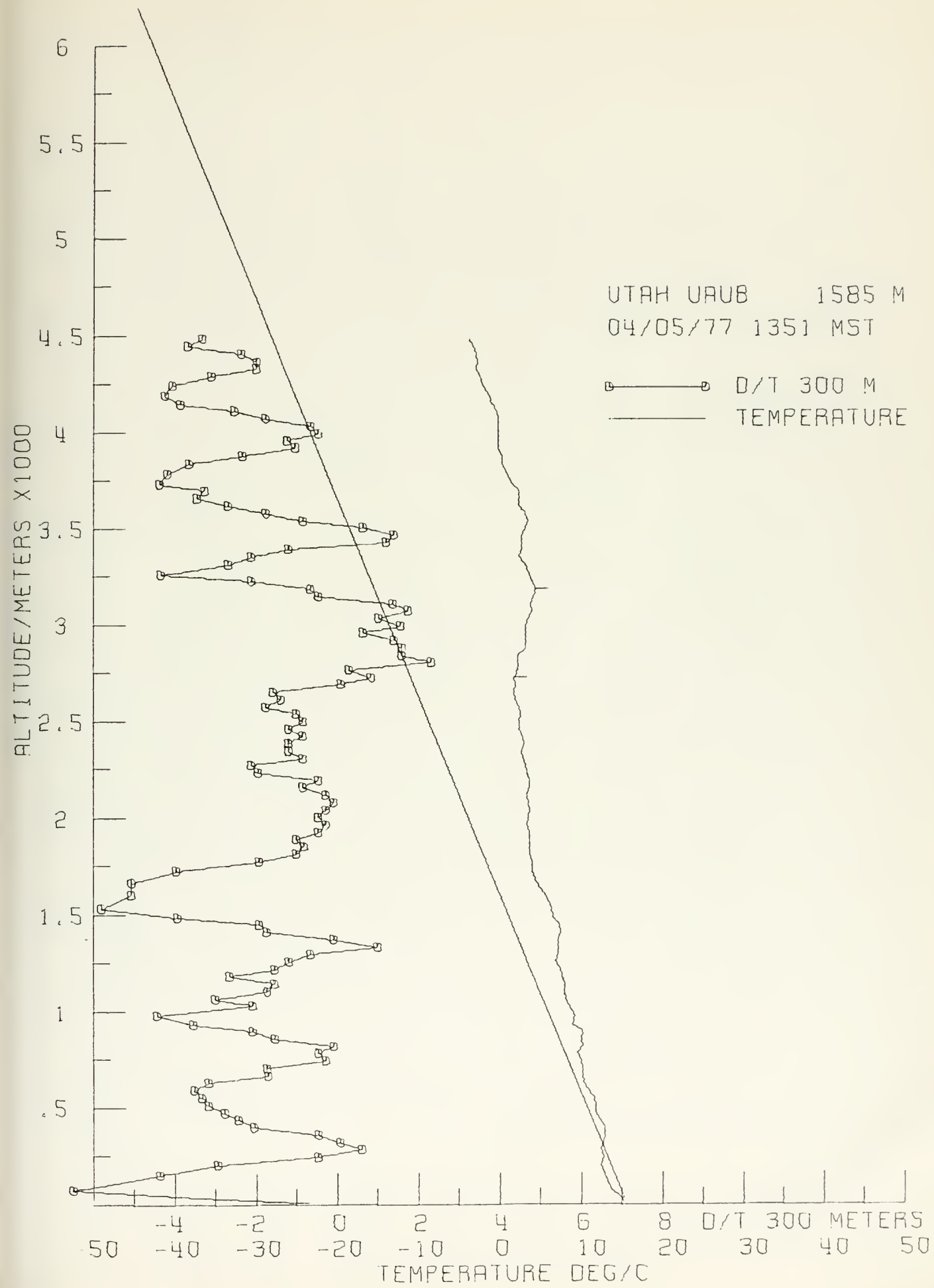
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/03/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/05/77 0555 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/05/77 0555 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/05/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
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4.5
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3.5
3
2.5
2
1.5
1
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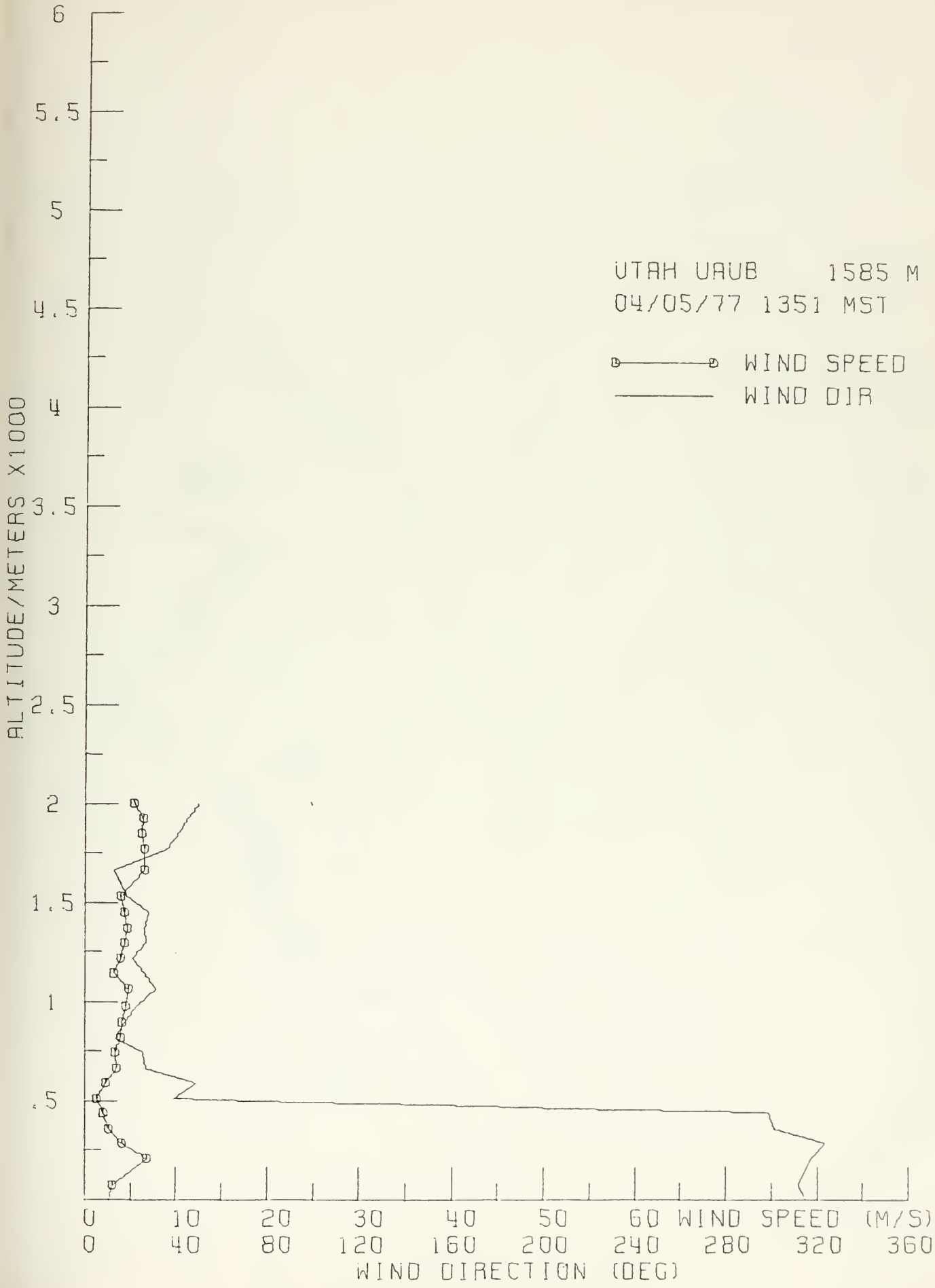
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/05/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
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1
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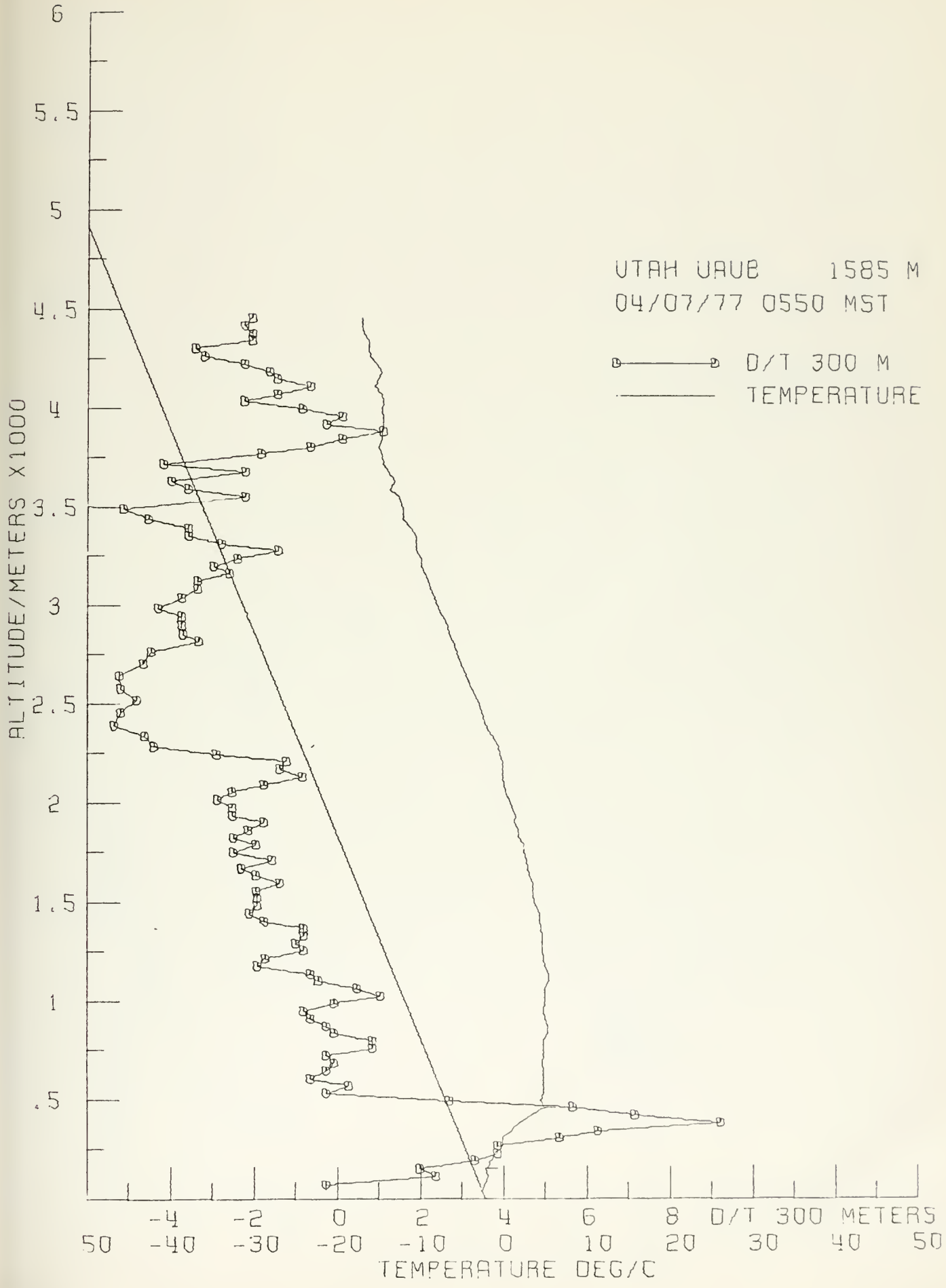
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/07/77 0550 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
4
3.5
3
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-4 -2 0 2 4 6 8 D/T 300 METERS
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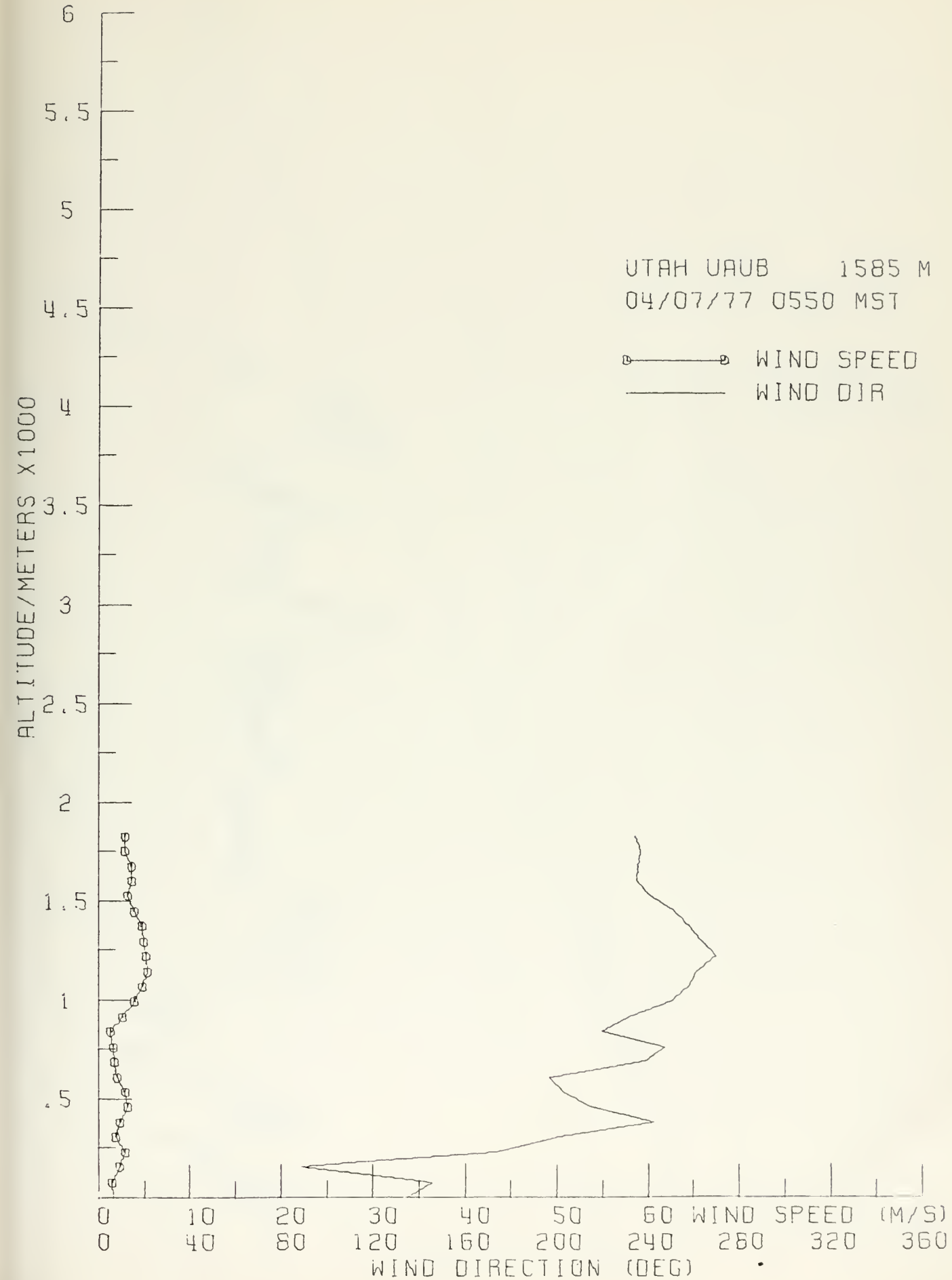
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/07/77 0550 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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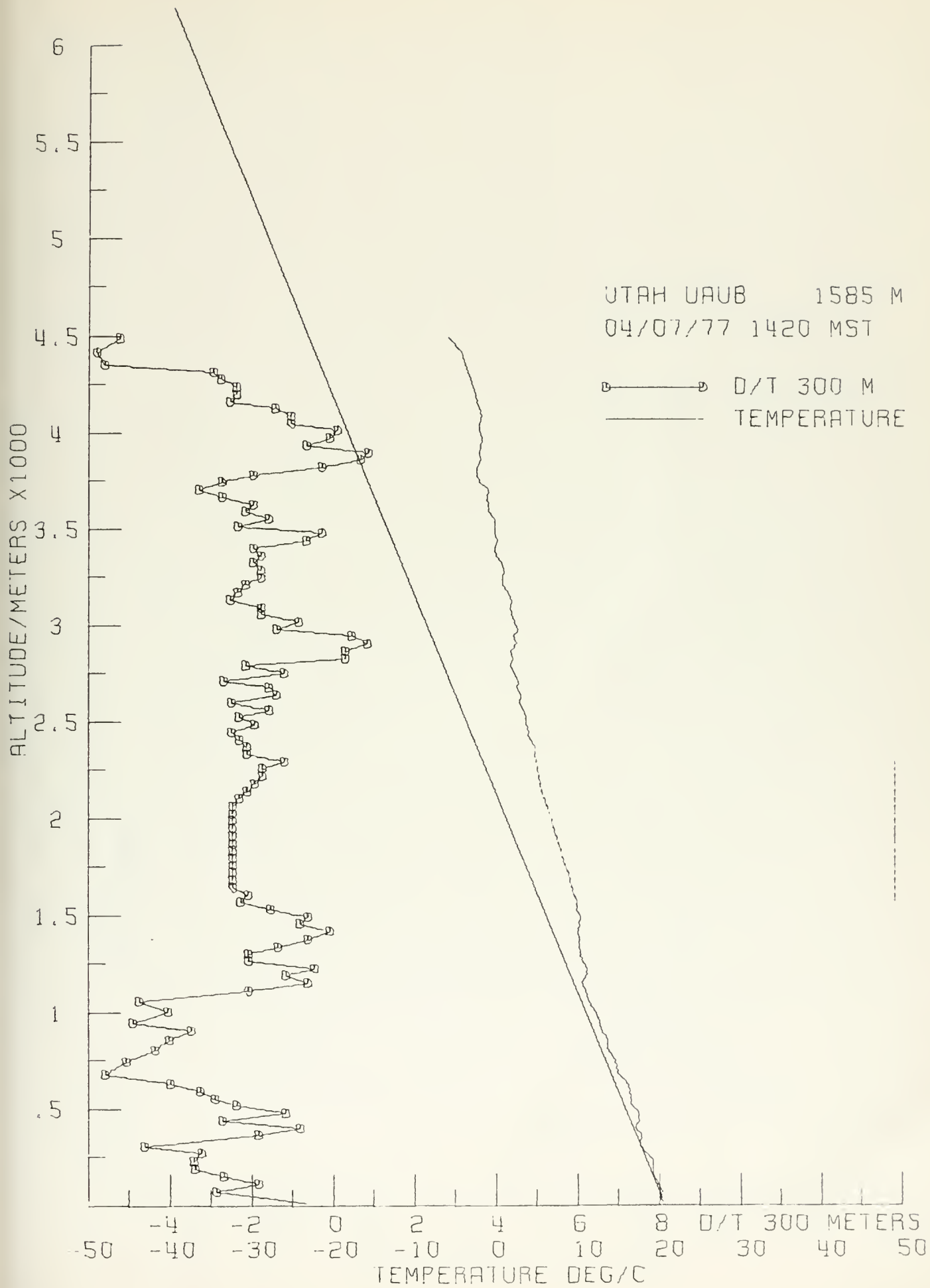
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/07/77 1420 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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1
.5
-4
-2
0
2
4
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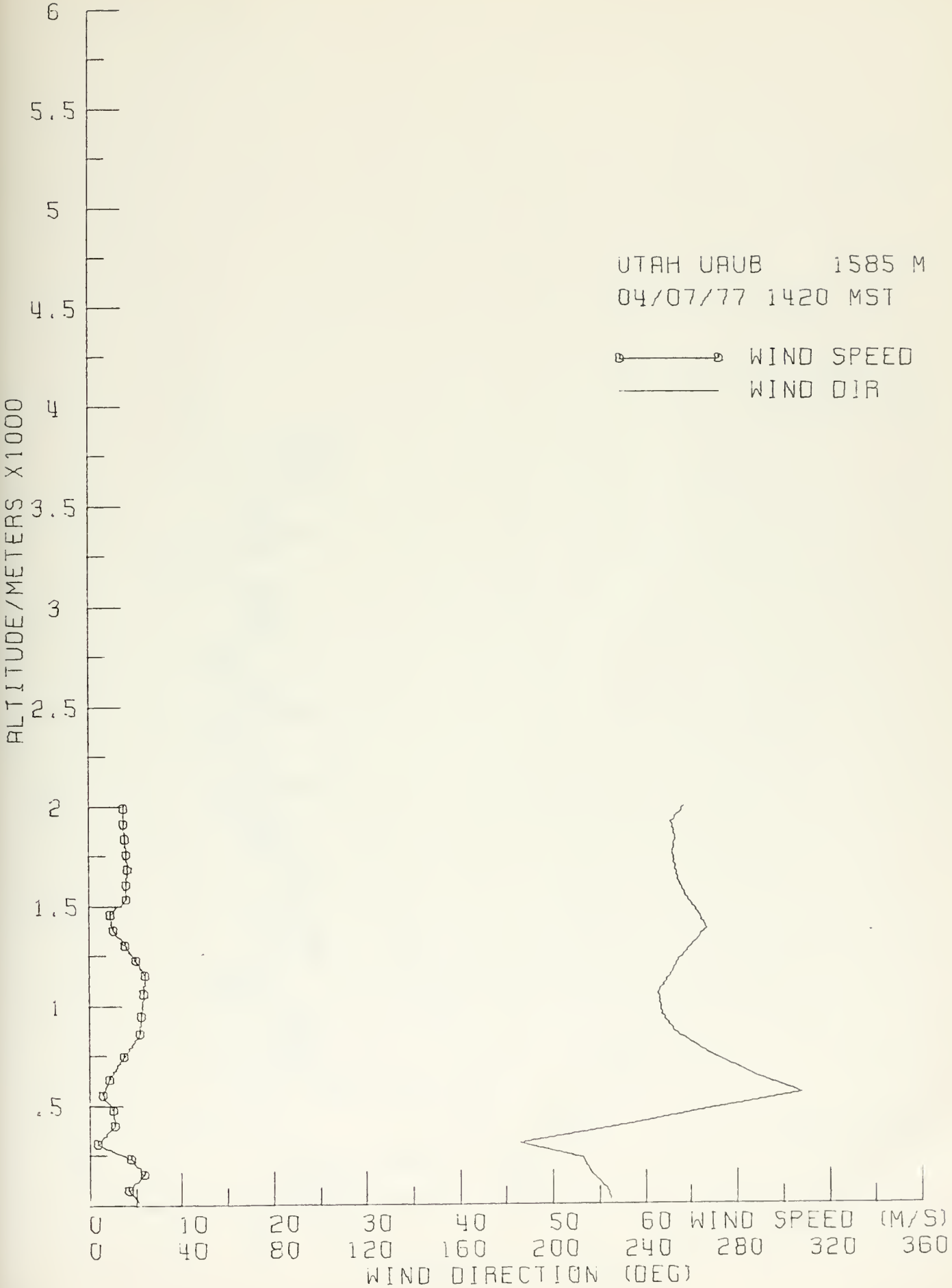
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/07/77 1420 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
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5
4.5
4
3.5
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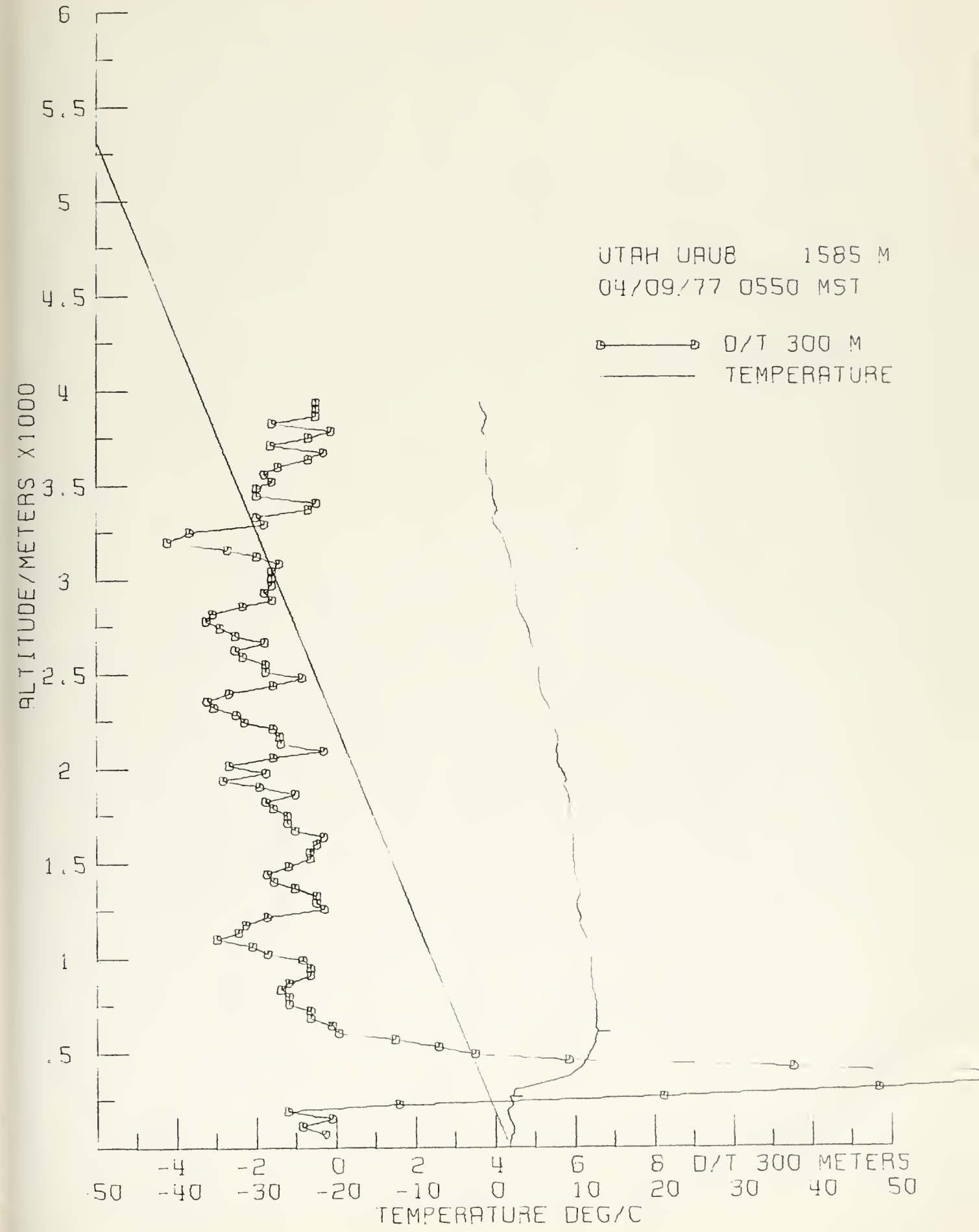
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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04/09/77 0550 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
3
2.5
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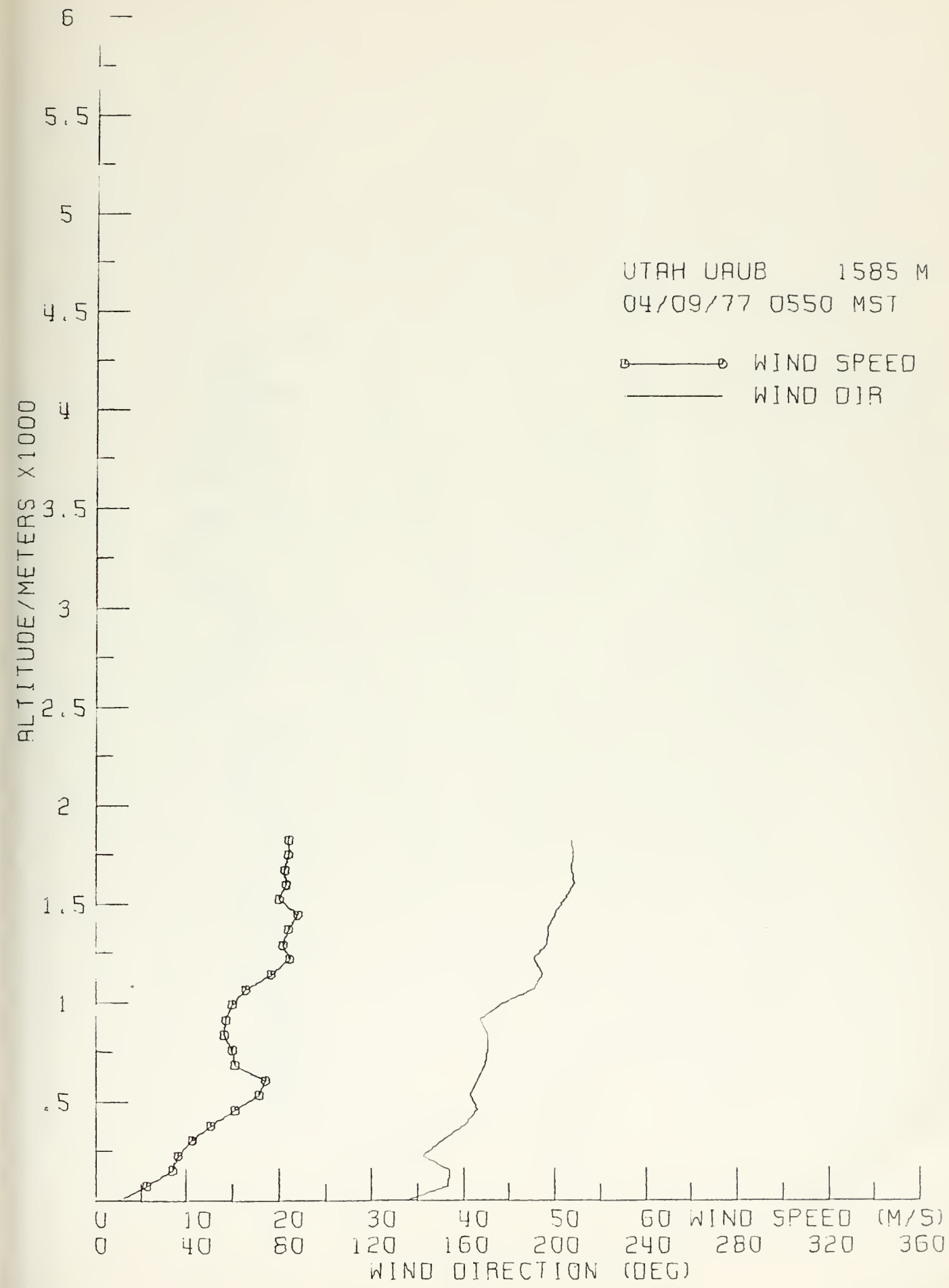
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/09/77 0550 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
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2.5
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1
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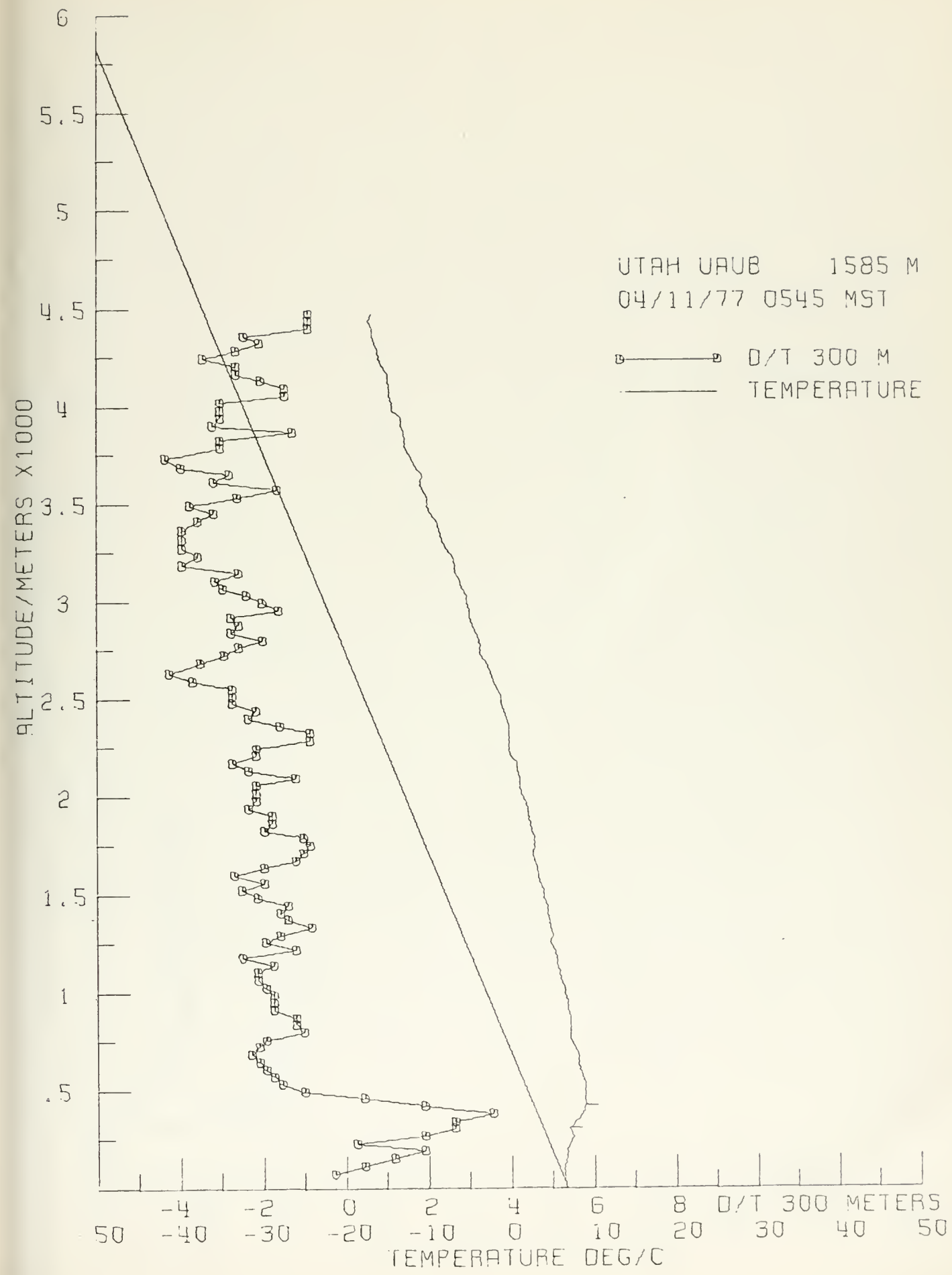
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/11/77 0545 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
4
3.5
3
2.5
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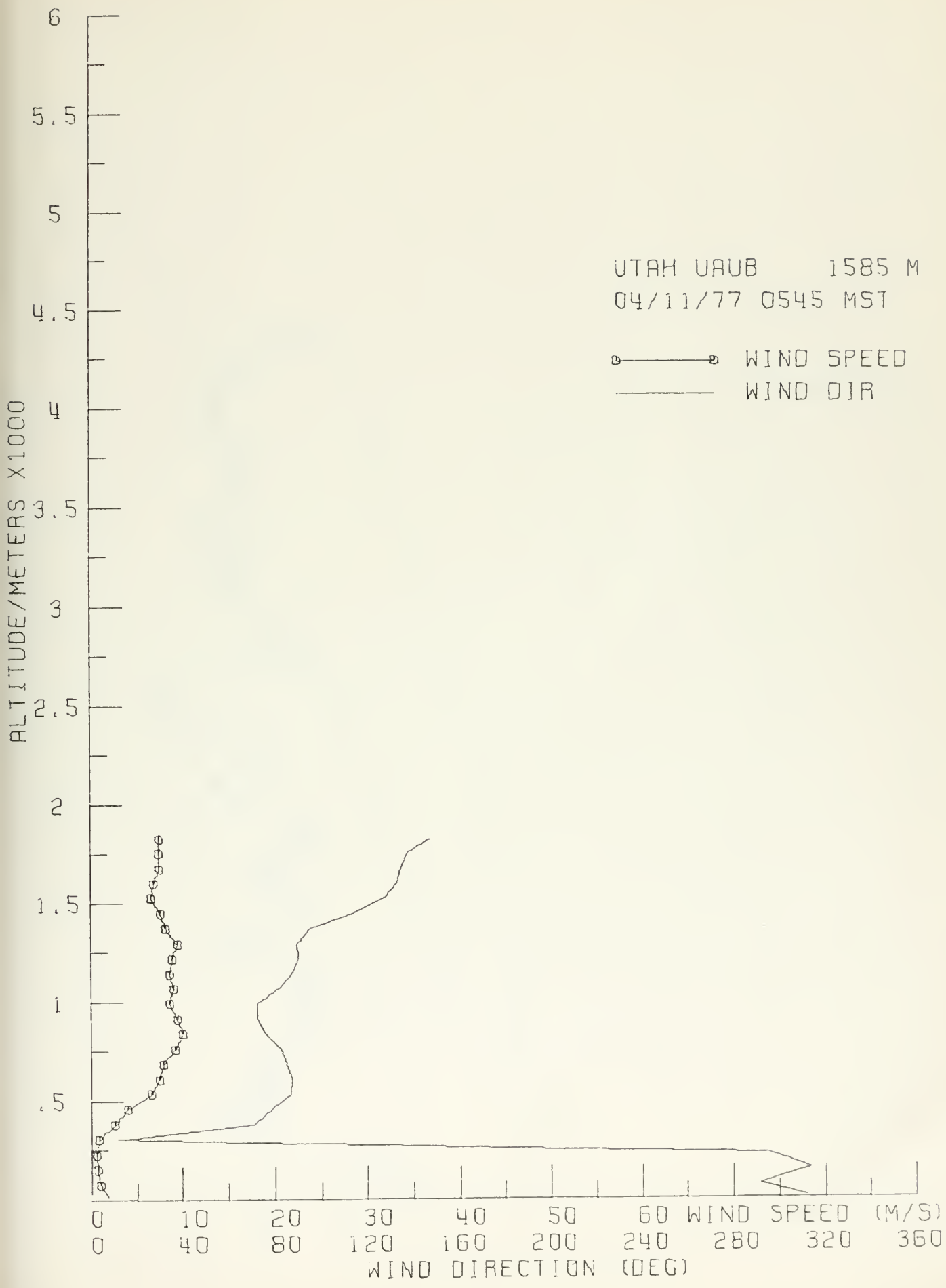
-4 -2 0 2 4 6 8 D/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/11/77 0545 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
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2
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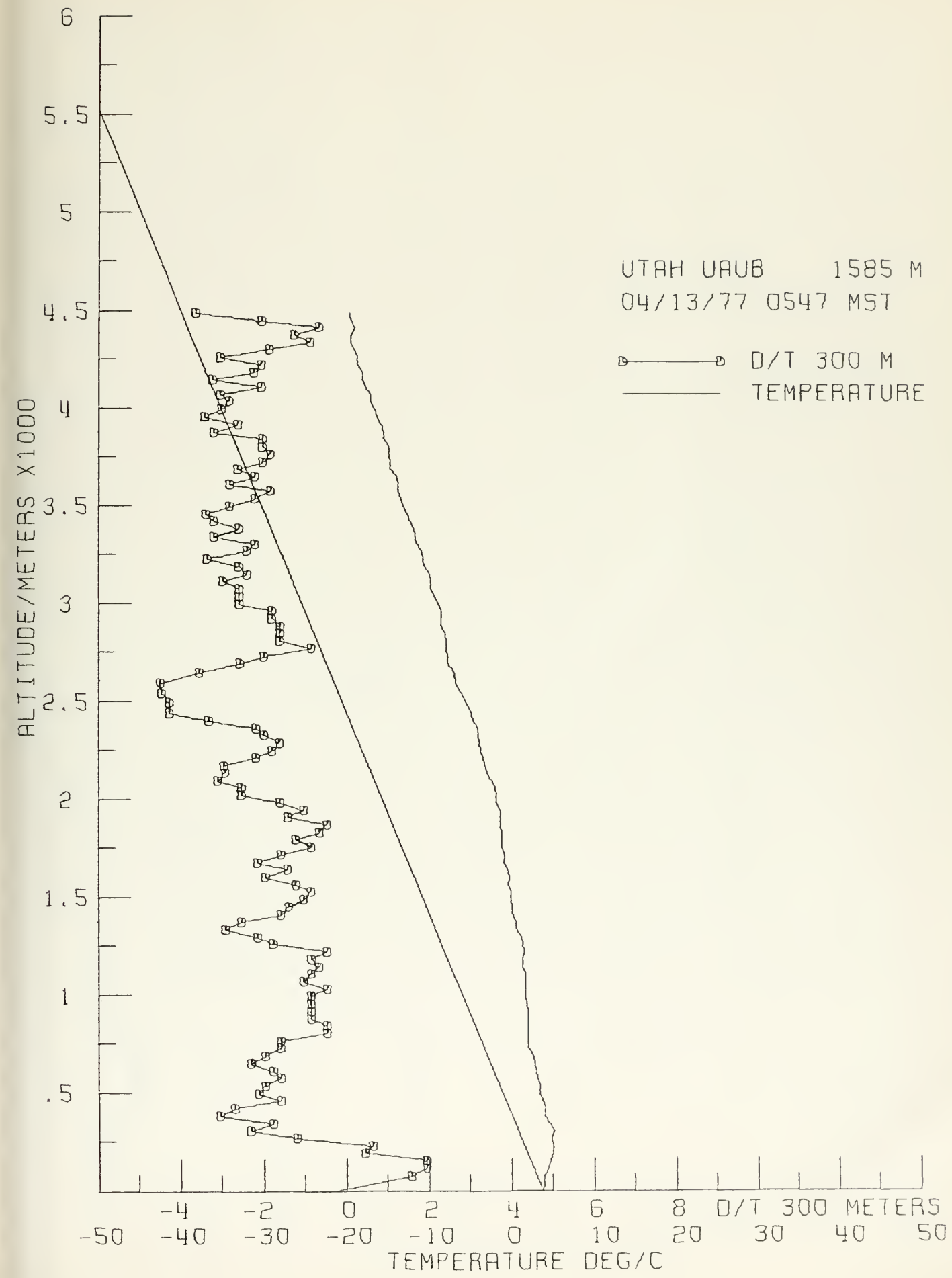
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/13/77 0547 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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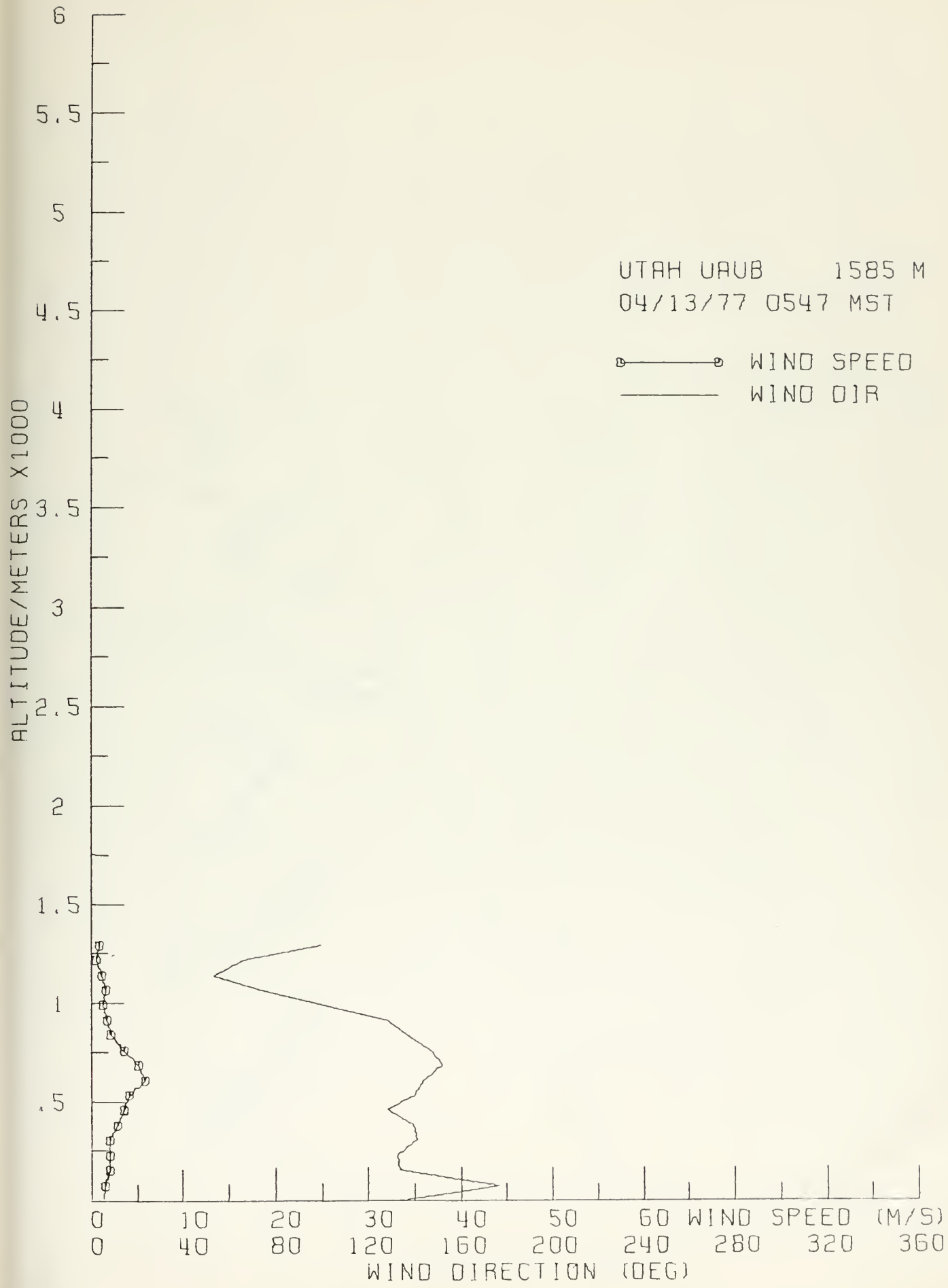
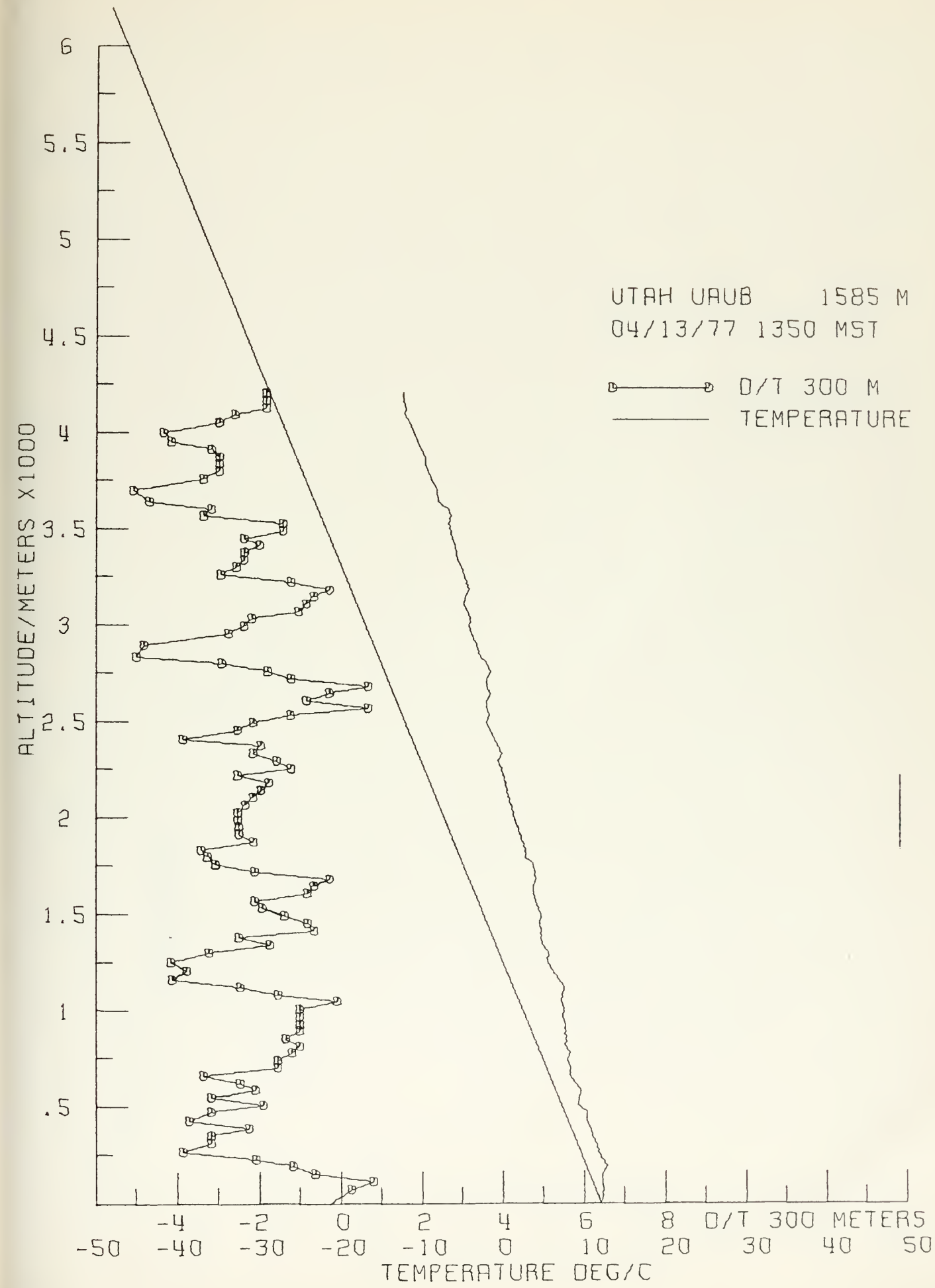
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/13/77 0547 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/13/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
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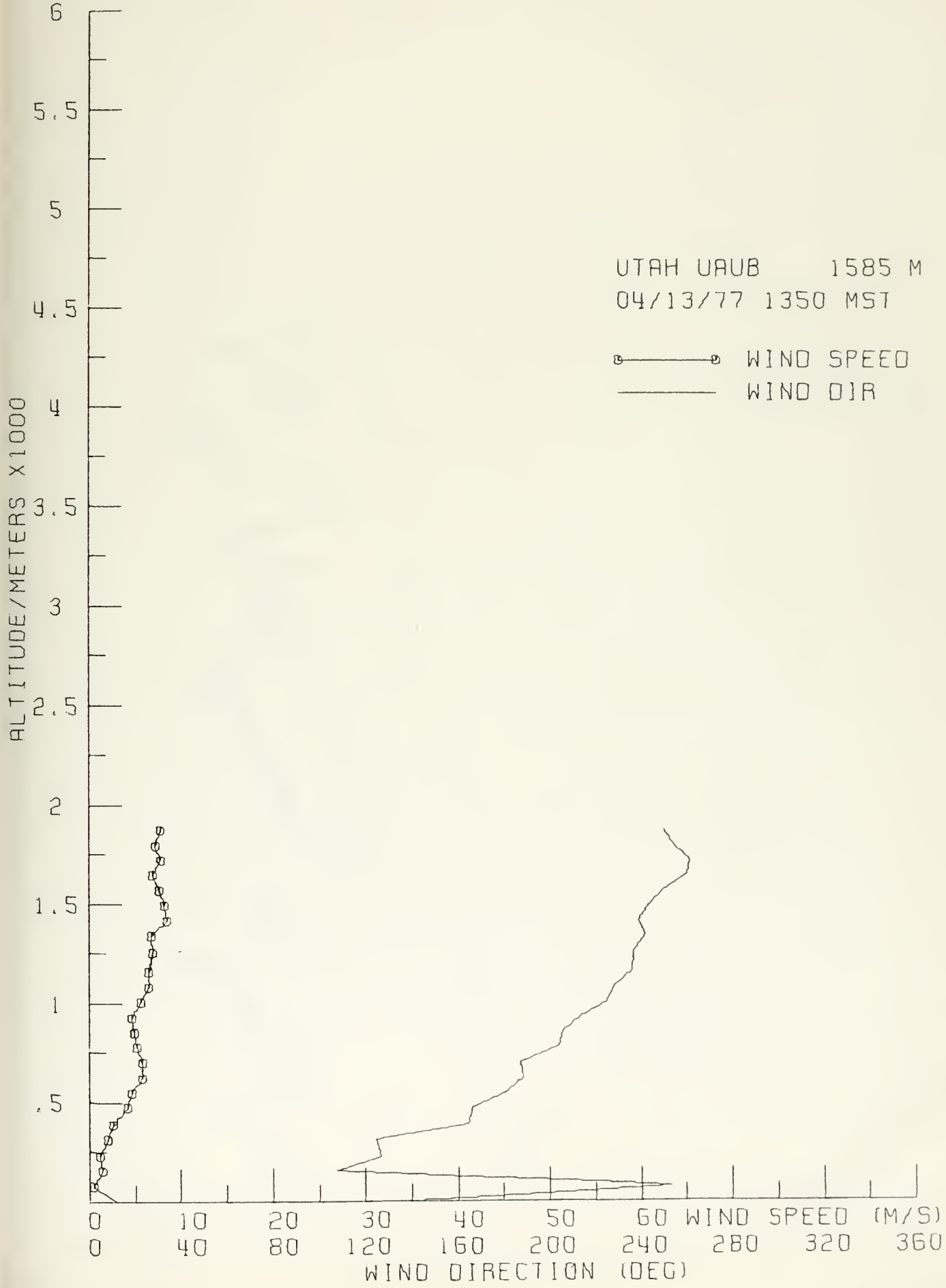
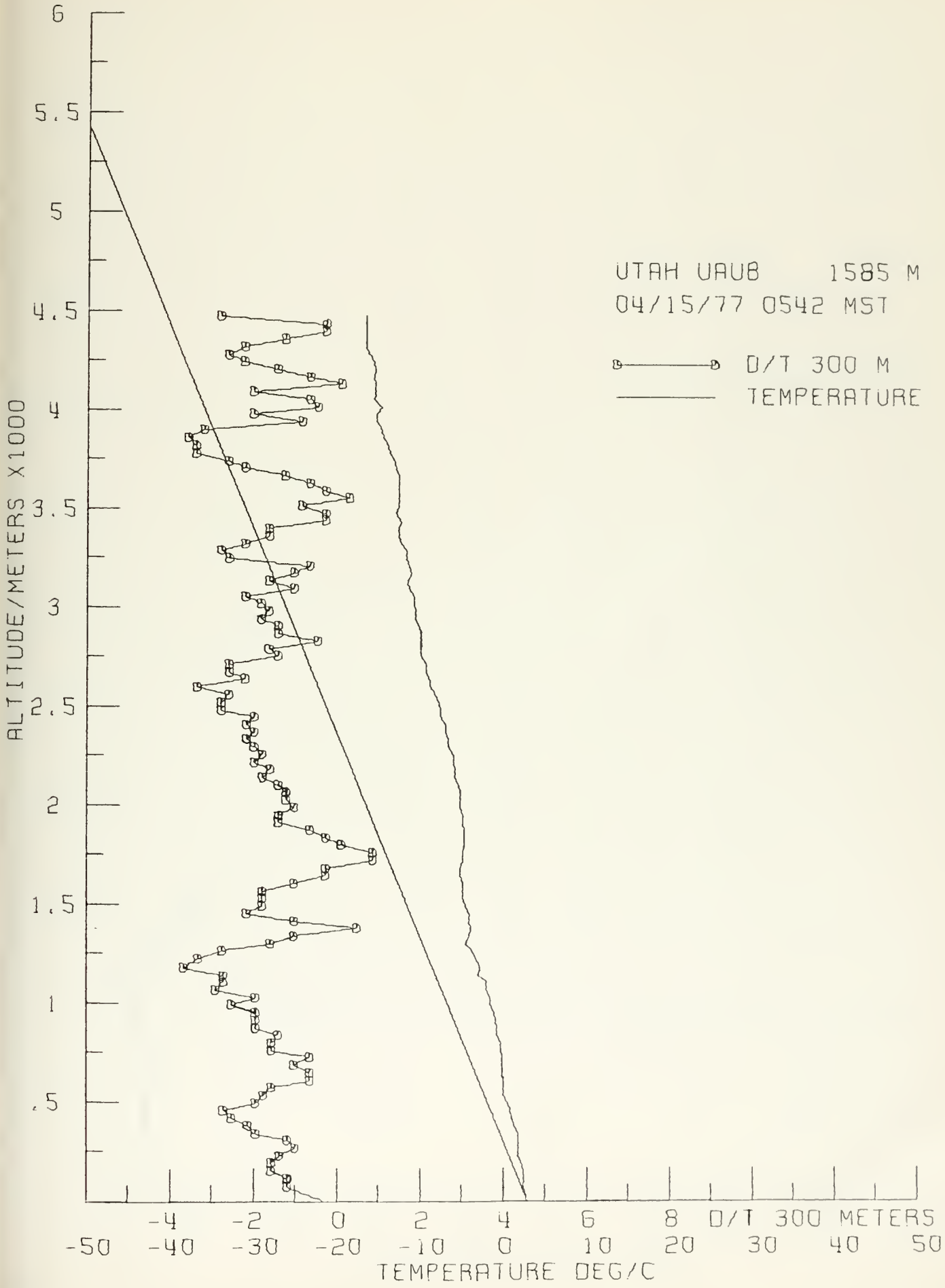
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/13/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/15/77 0542 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
4
3.5
3
2.5
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1.5
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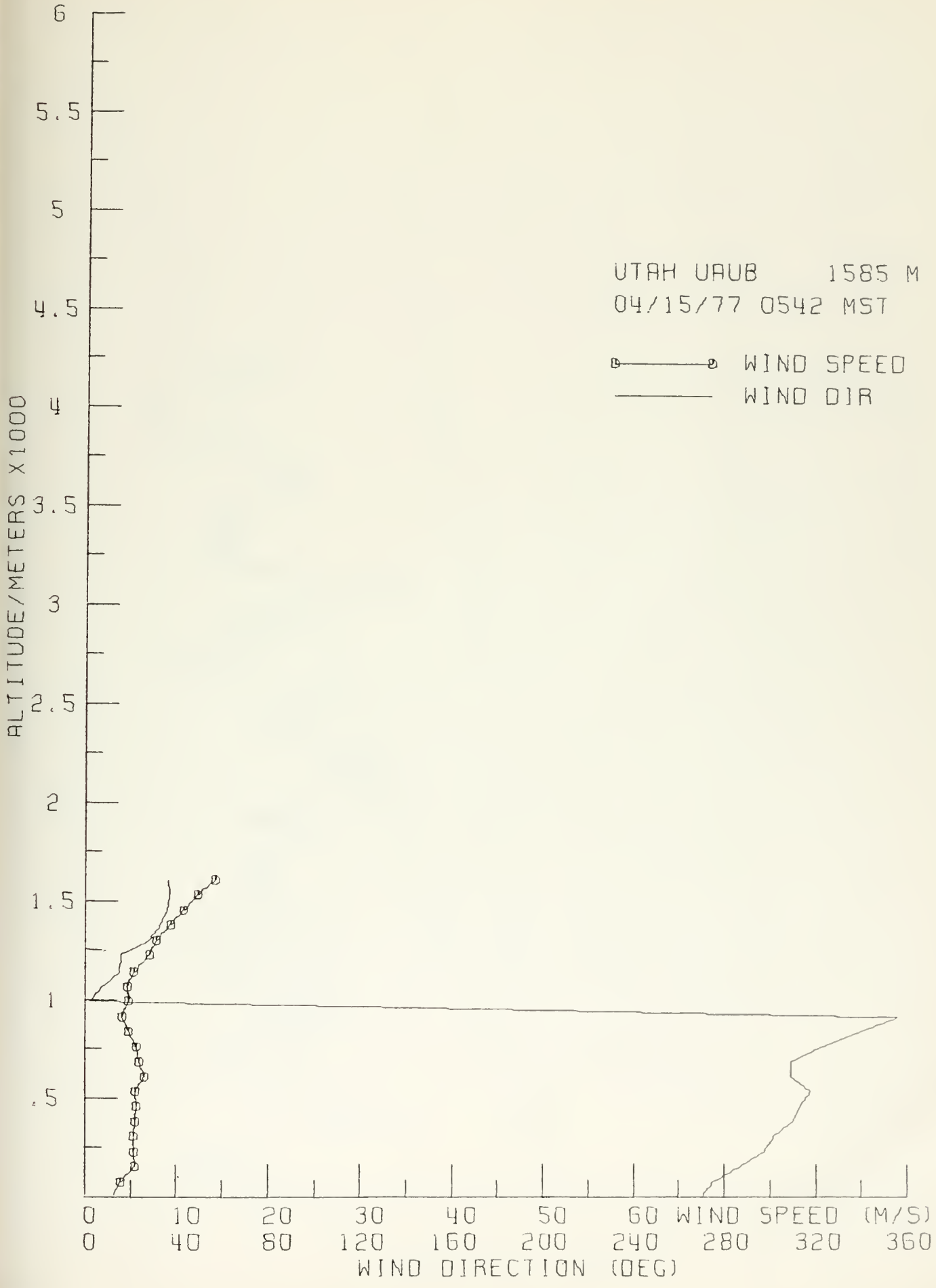
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/15/77 0542 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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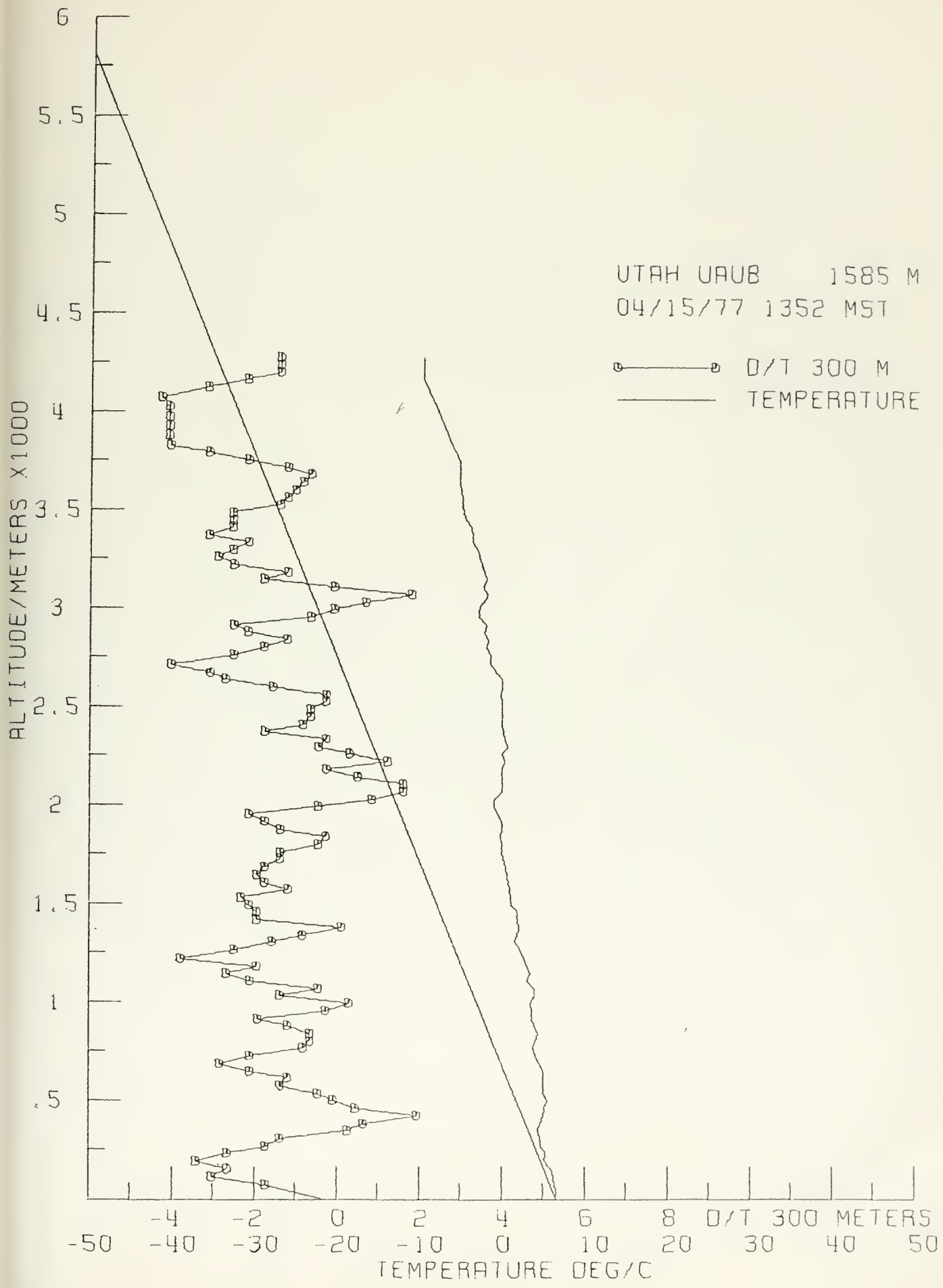
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/15/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
3
2.5
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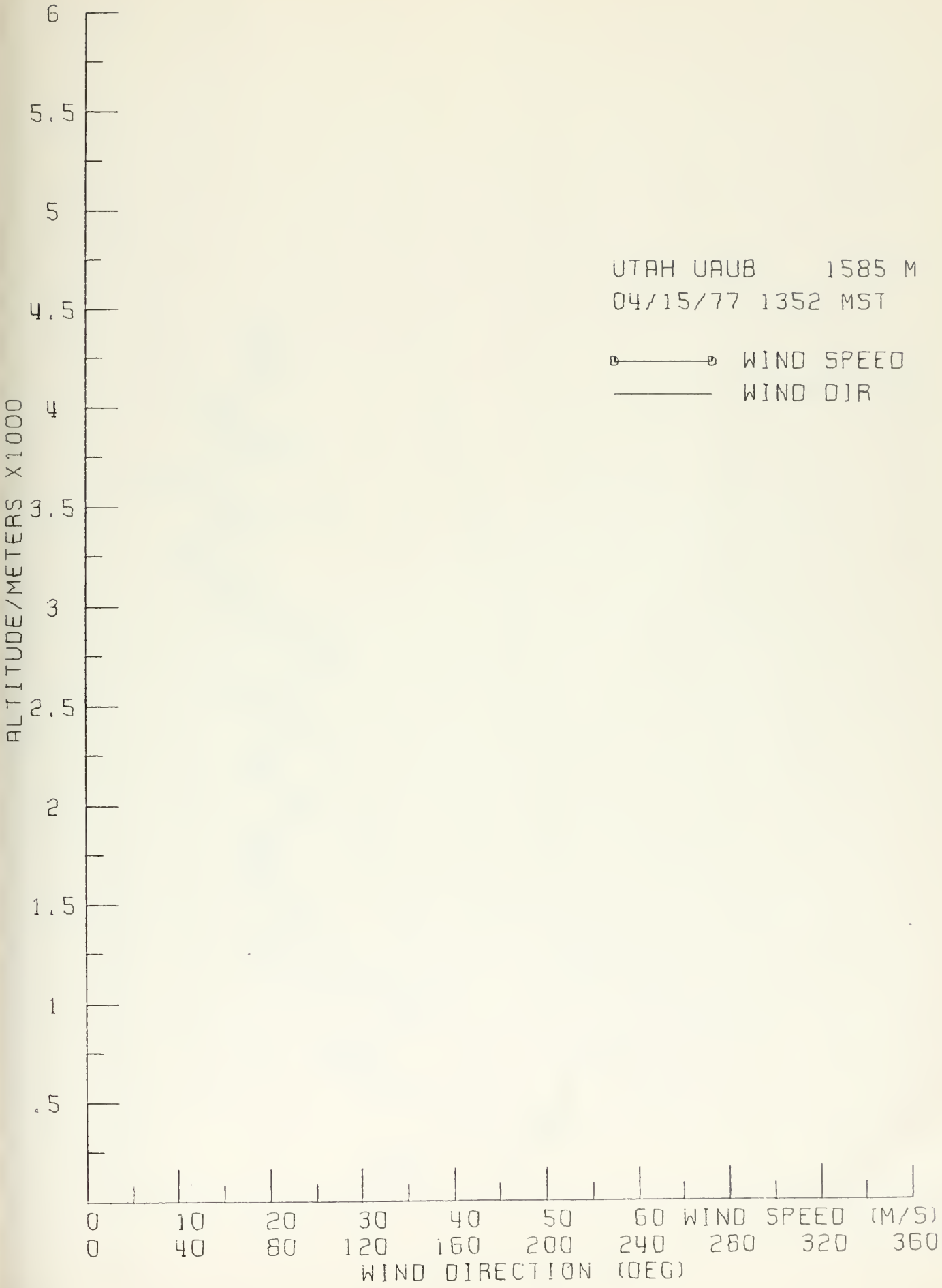
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/15/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
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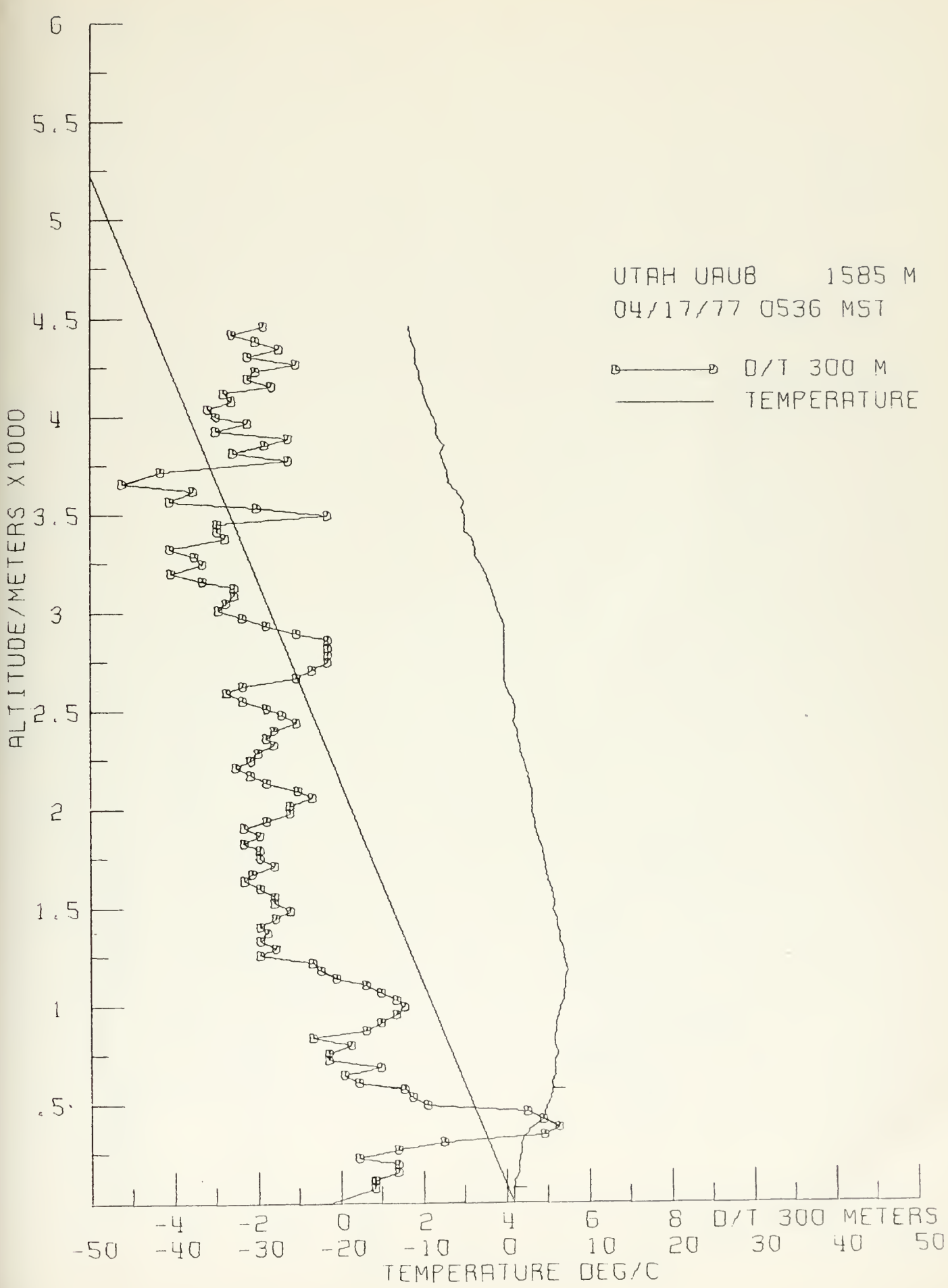
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/17/77 0536 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3
2.5
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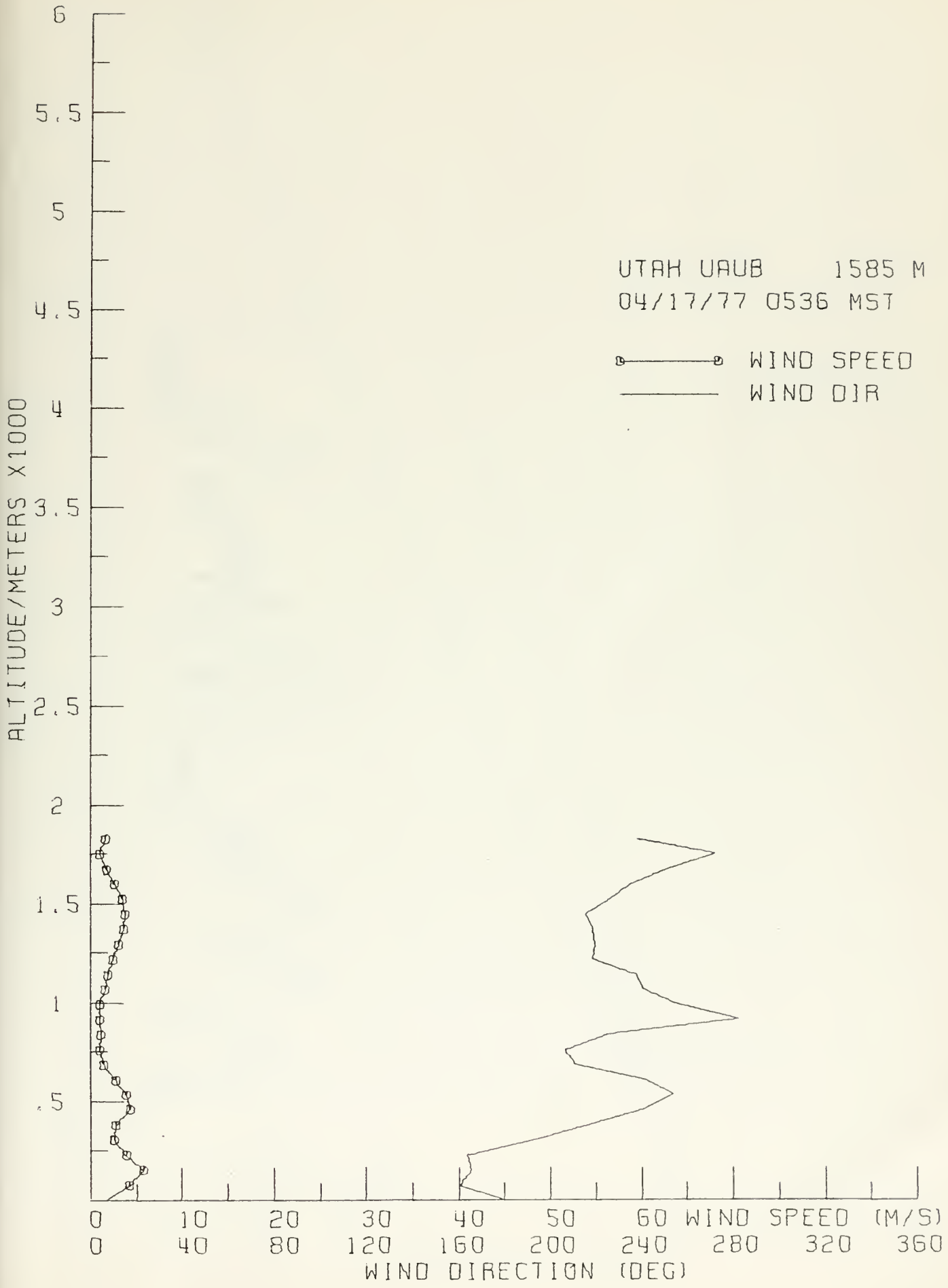
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/17/77 0536 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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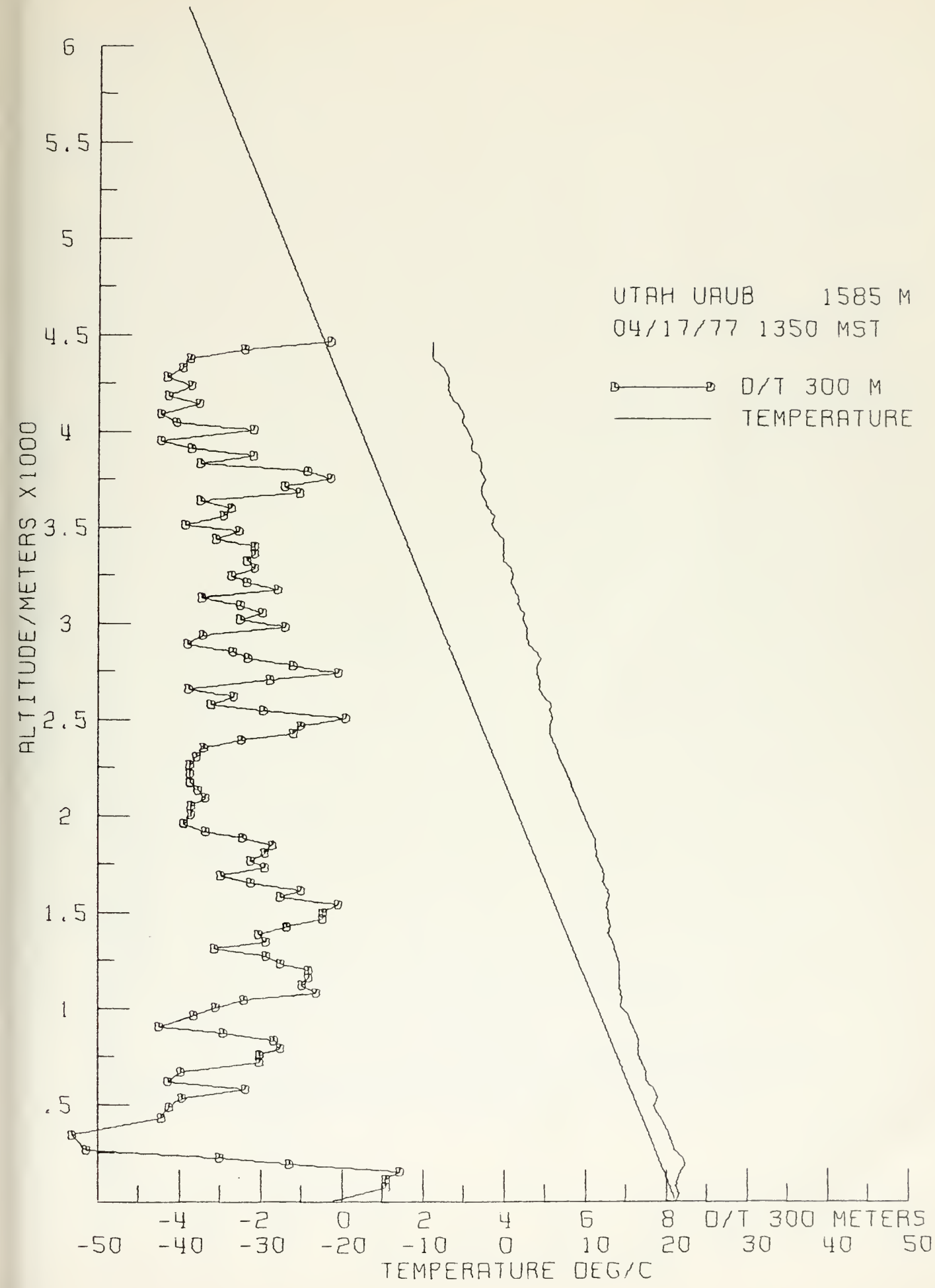
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/17/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
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3.5
3
2.5
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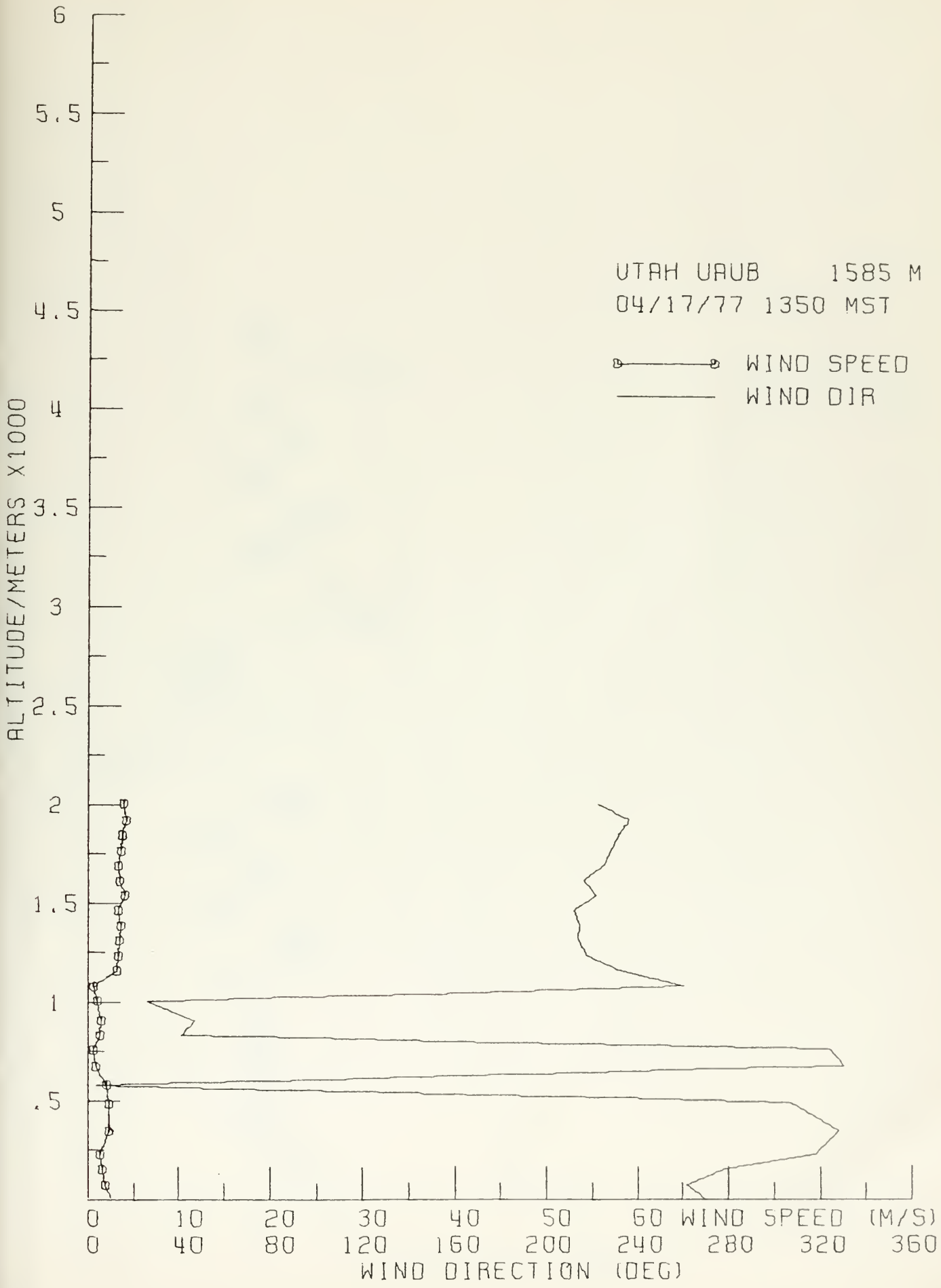
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/17/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
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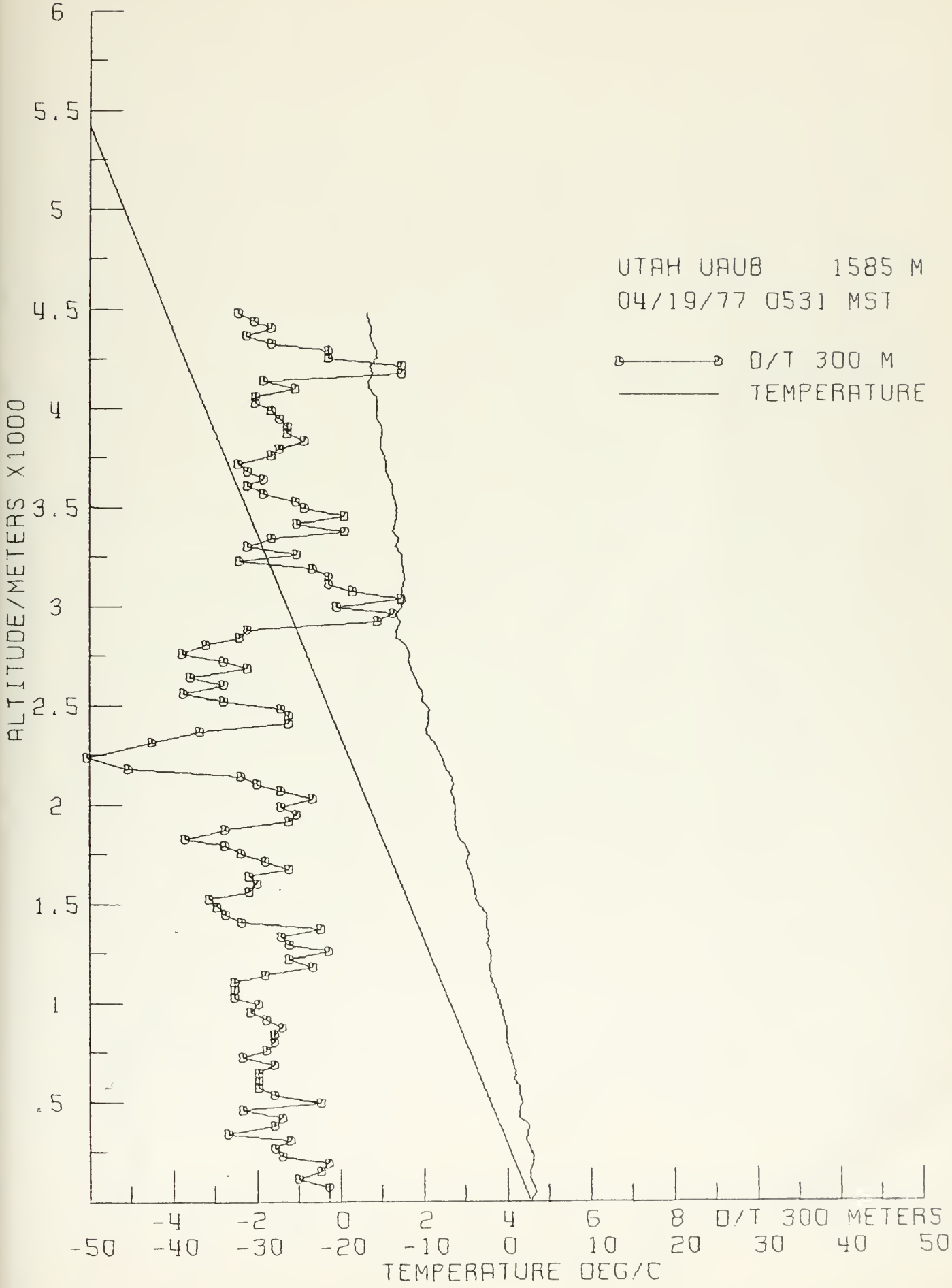
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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04/19/77 0531 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
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-30
-20
-10
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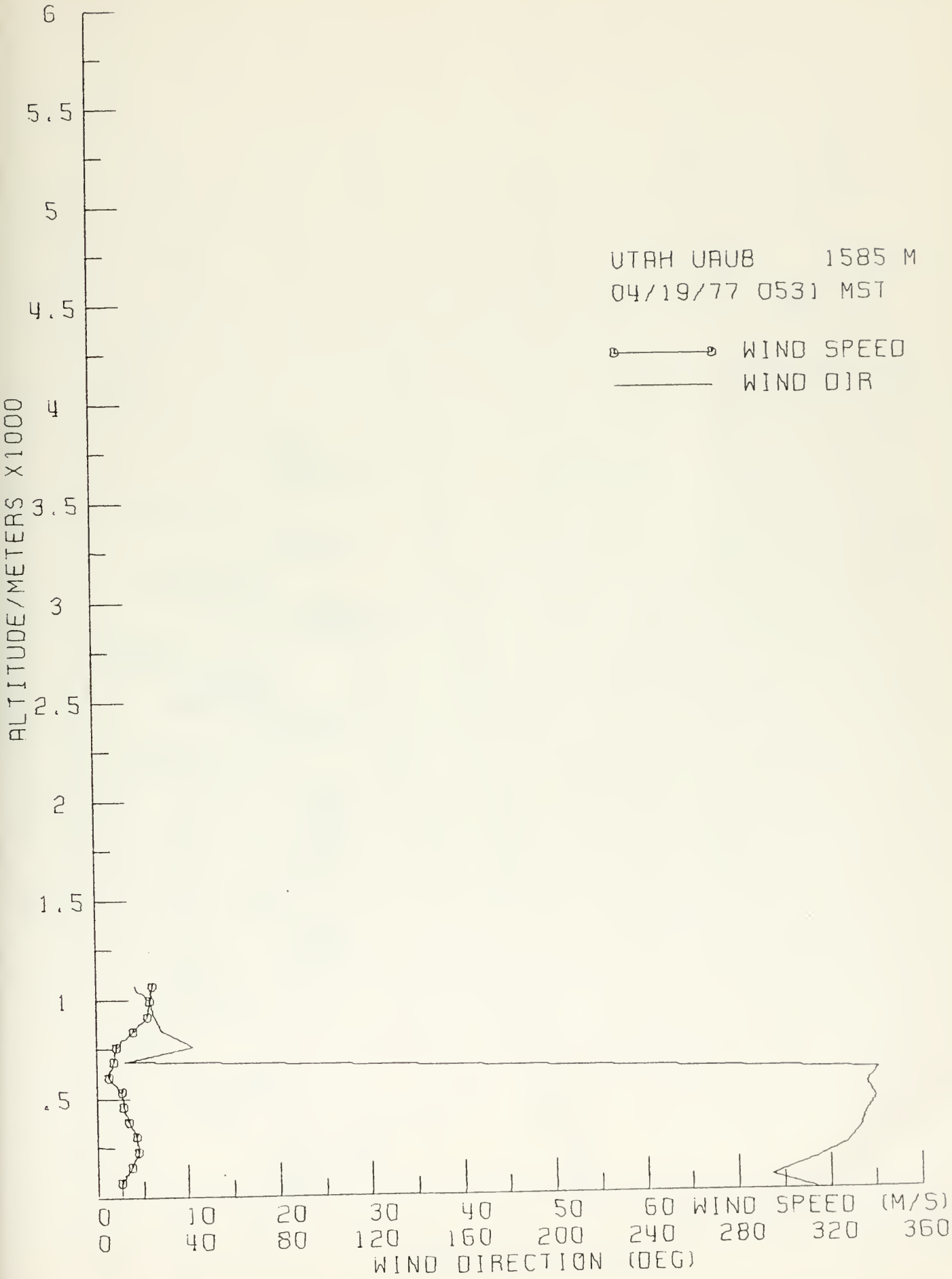
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/19/77 0531 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
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4.5
4
3.5
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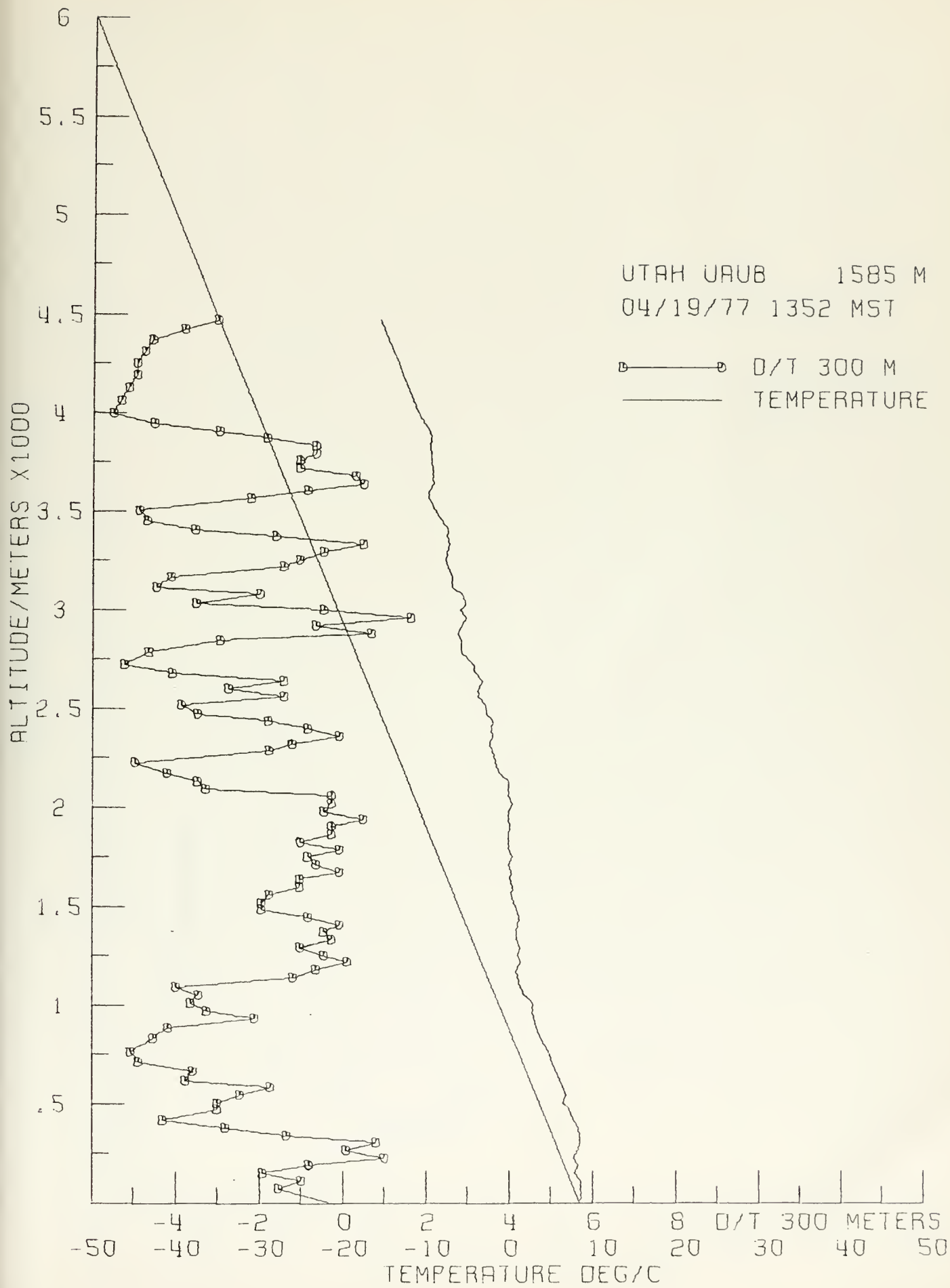
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/19/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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3.5
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2.5
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-4 -2 0 2 4 6 8 D/T 300 METERS
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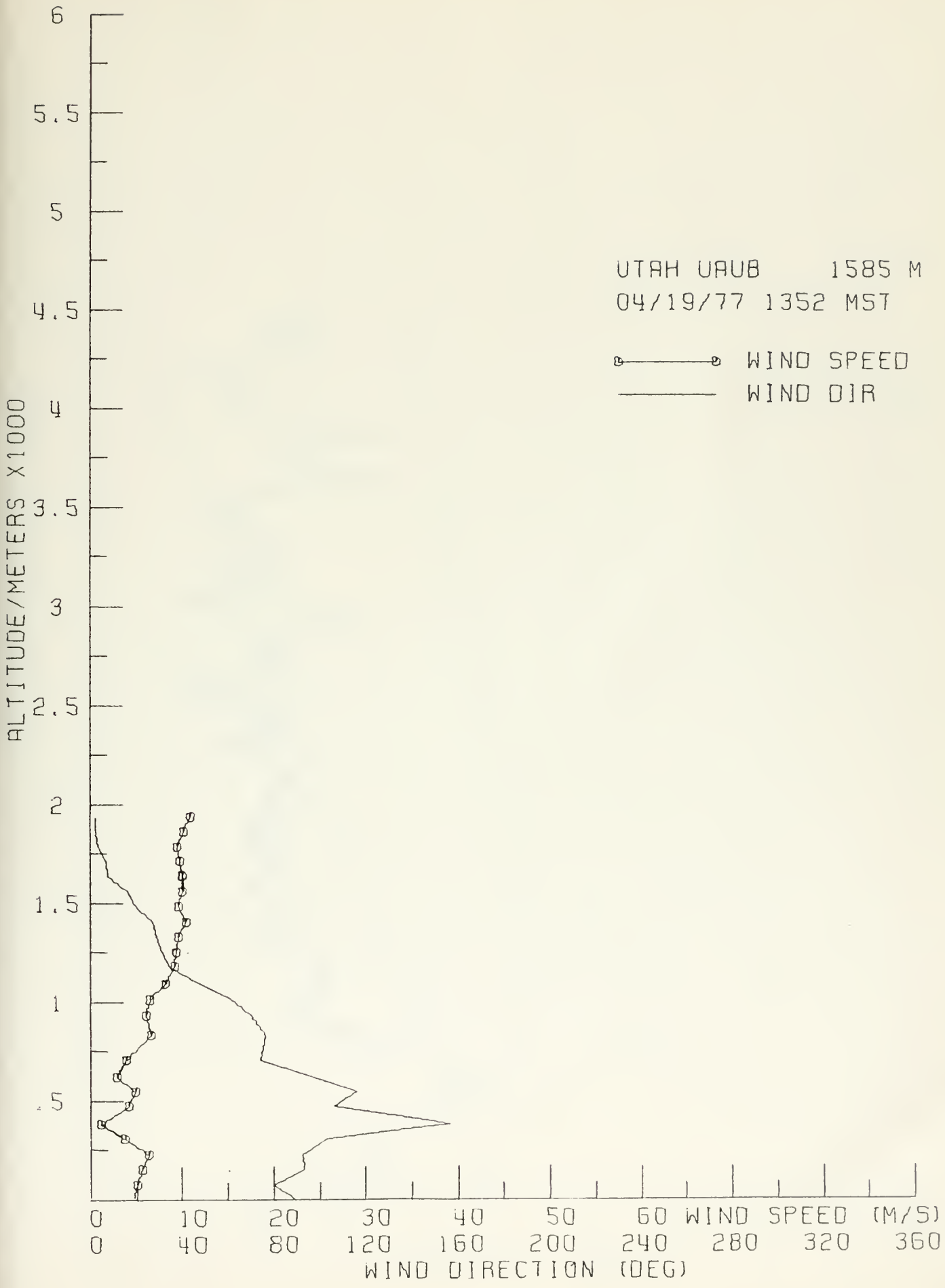
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/19/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
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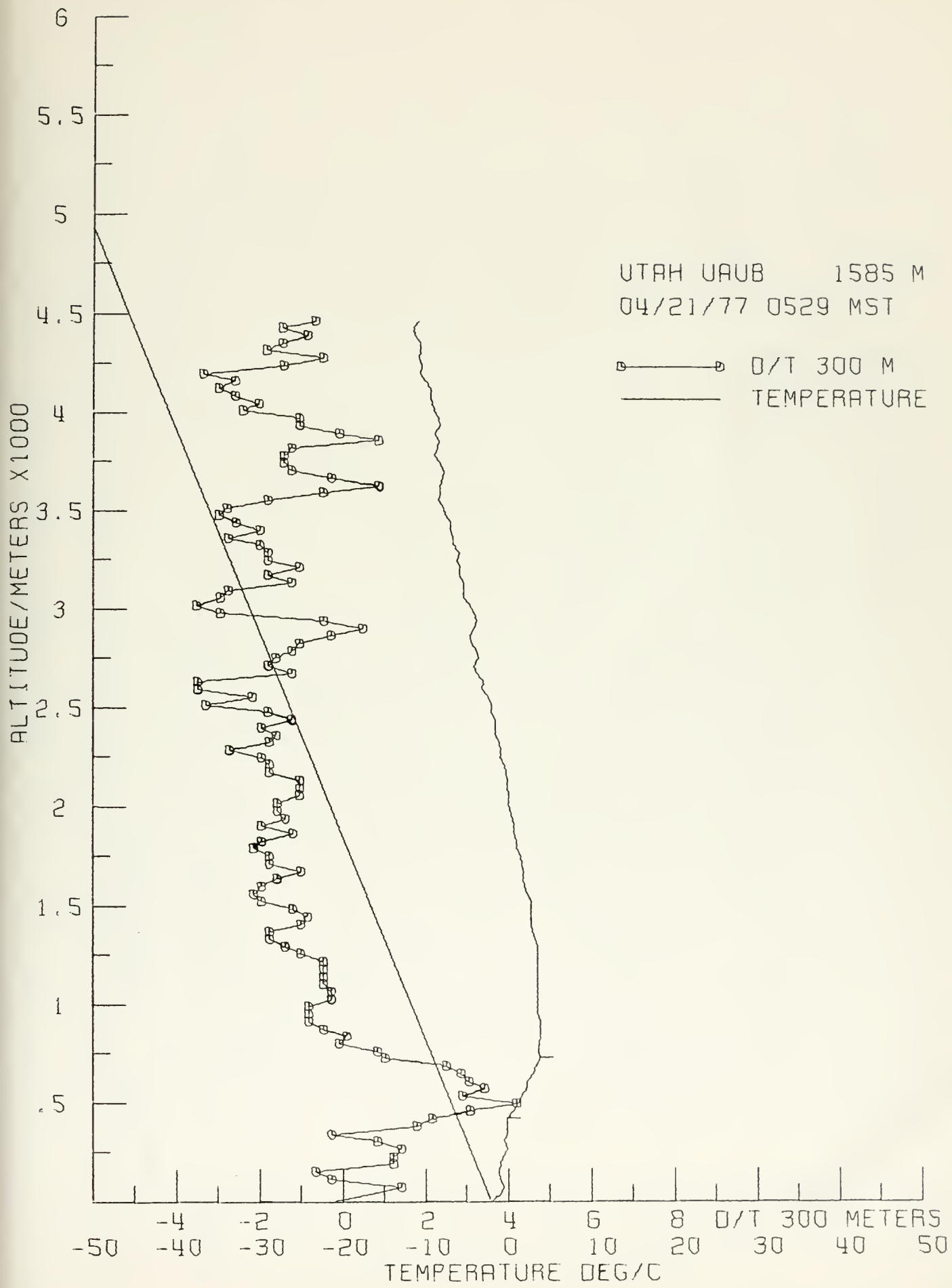
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/21/77 0529 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
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2.5
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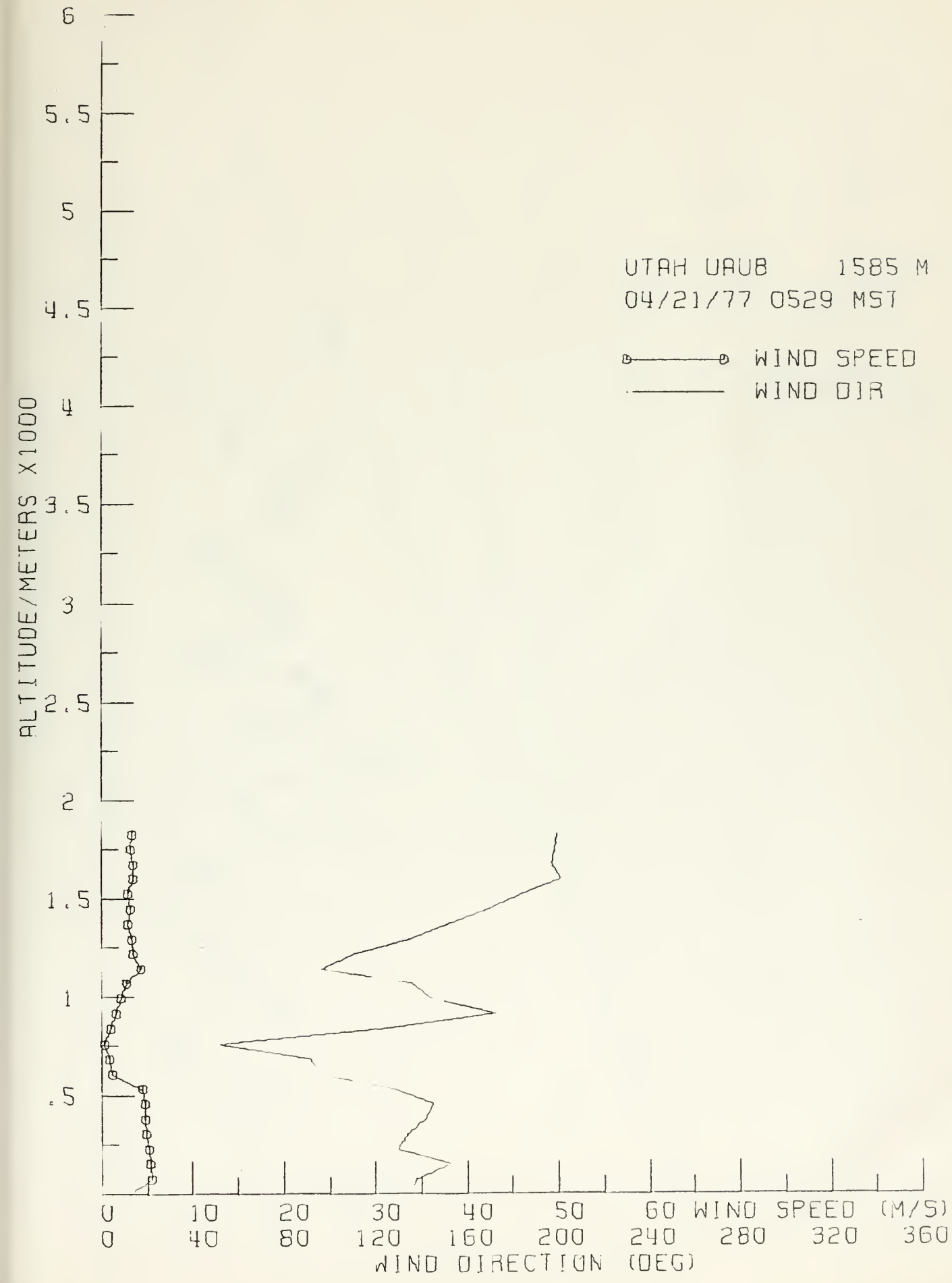
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/21/77 0529 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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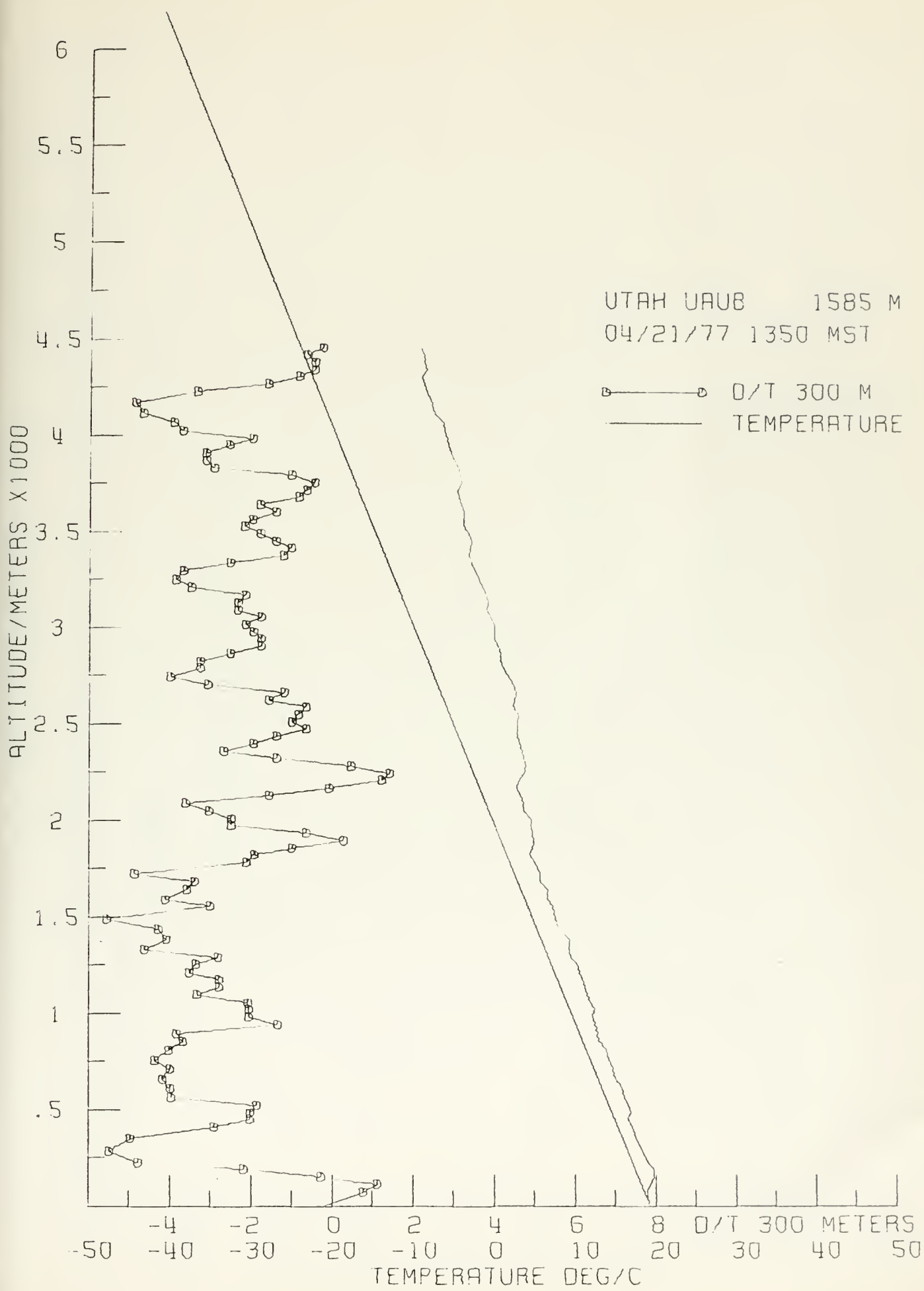
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/21/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
5
4.5
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3.5
3
2.5
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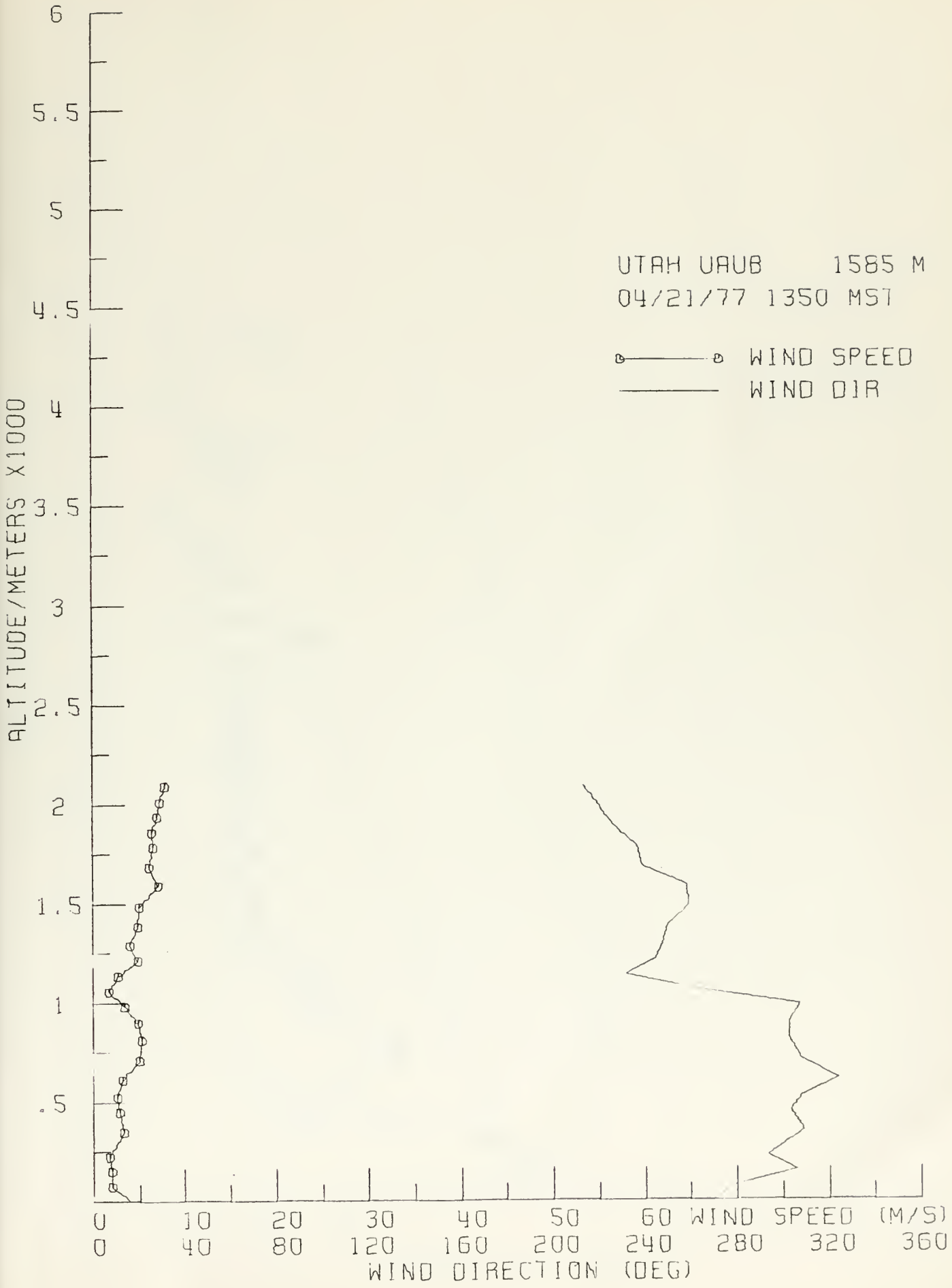
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/21/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
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4.5
4
3.5
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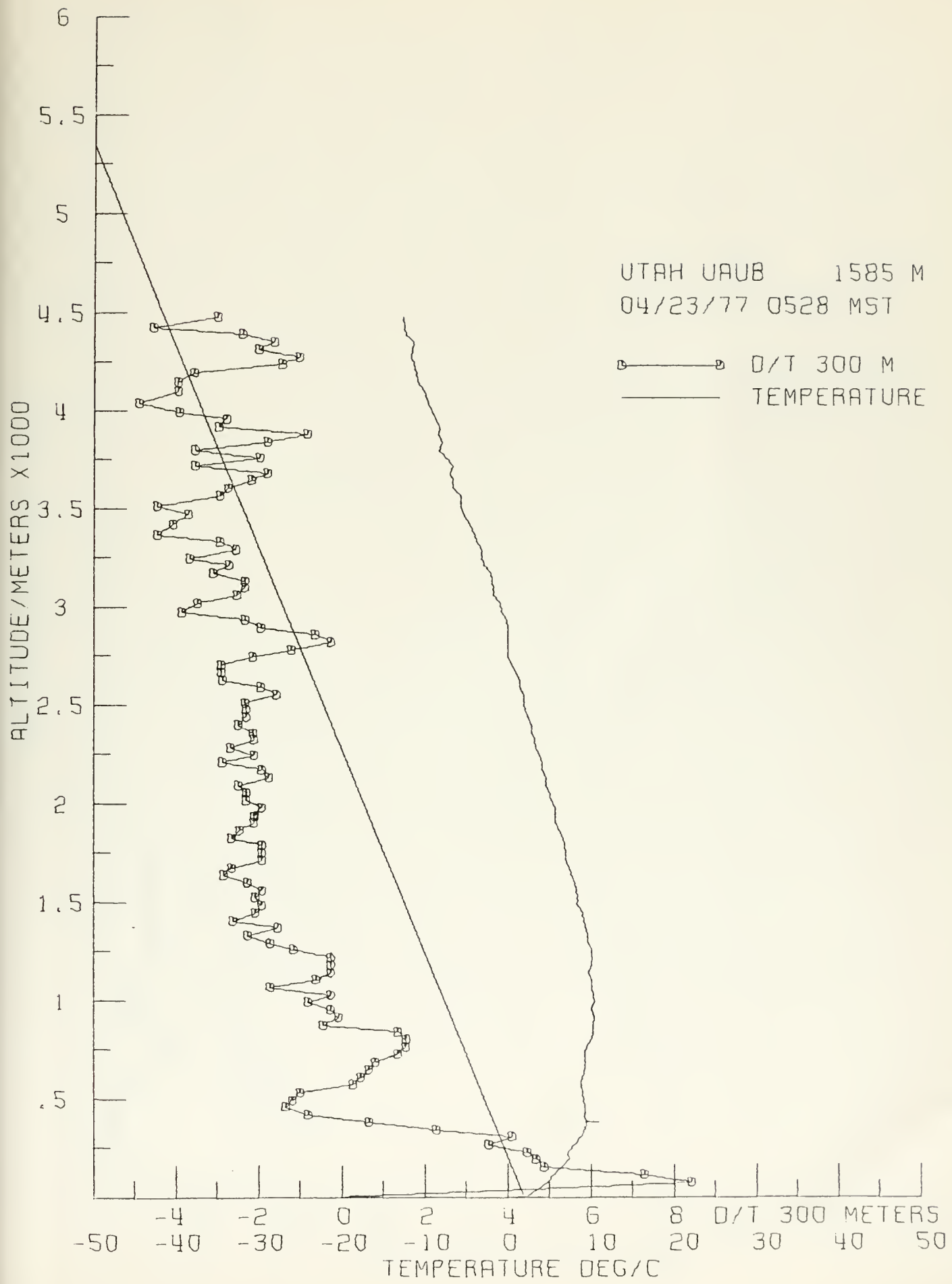
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/23/77 0528 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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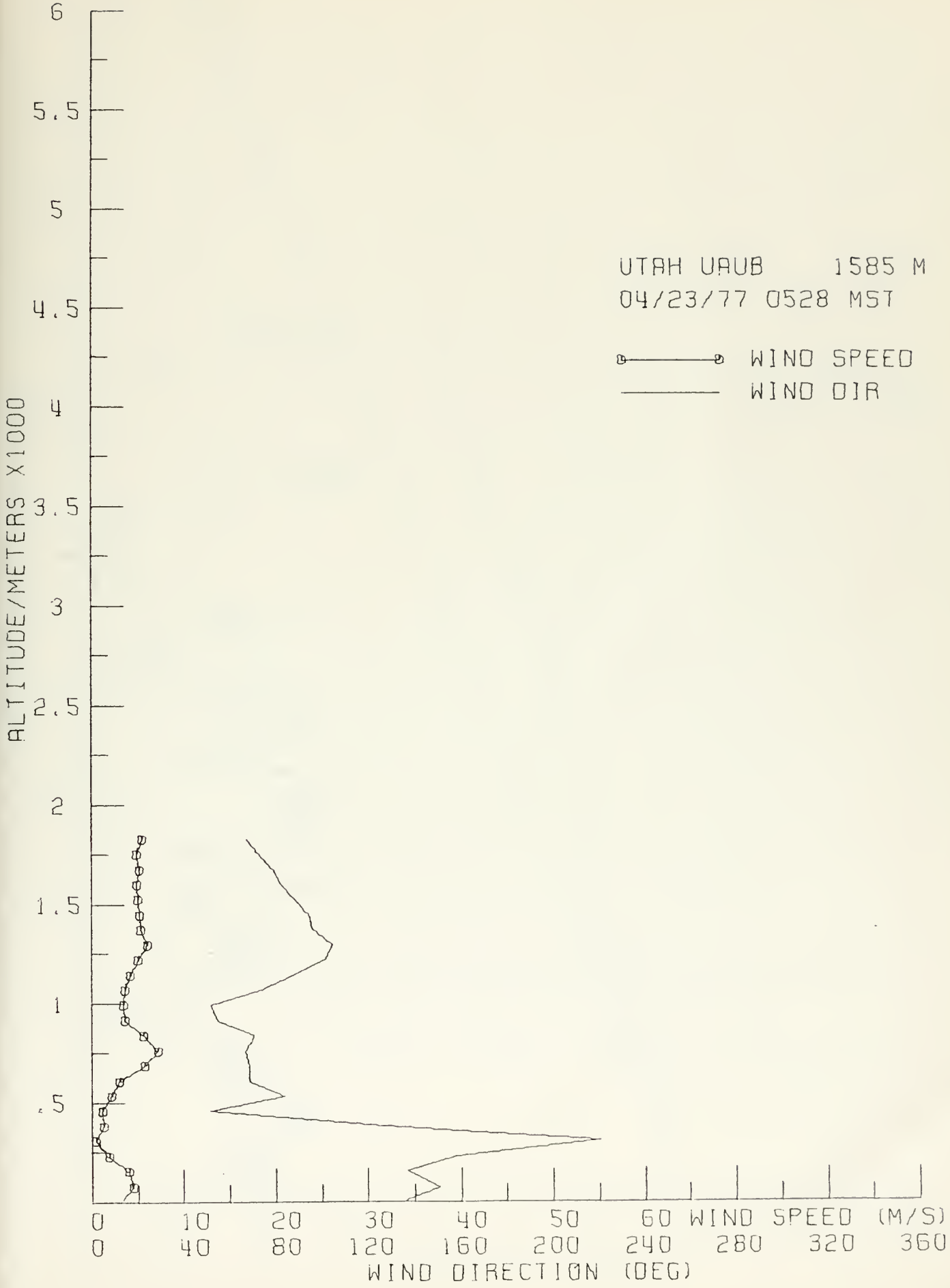
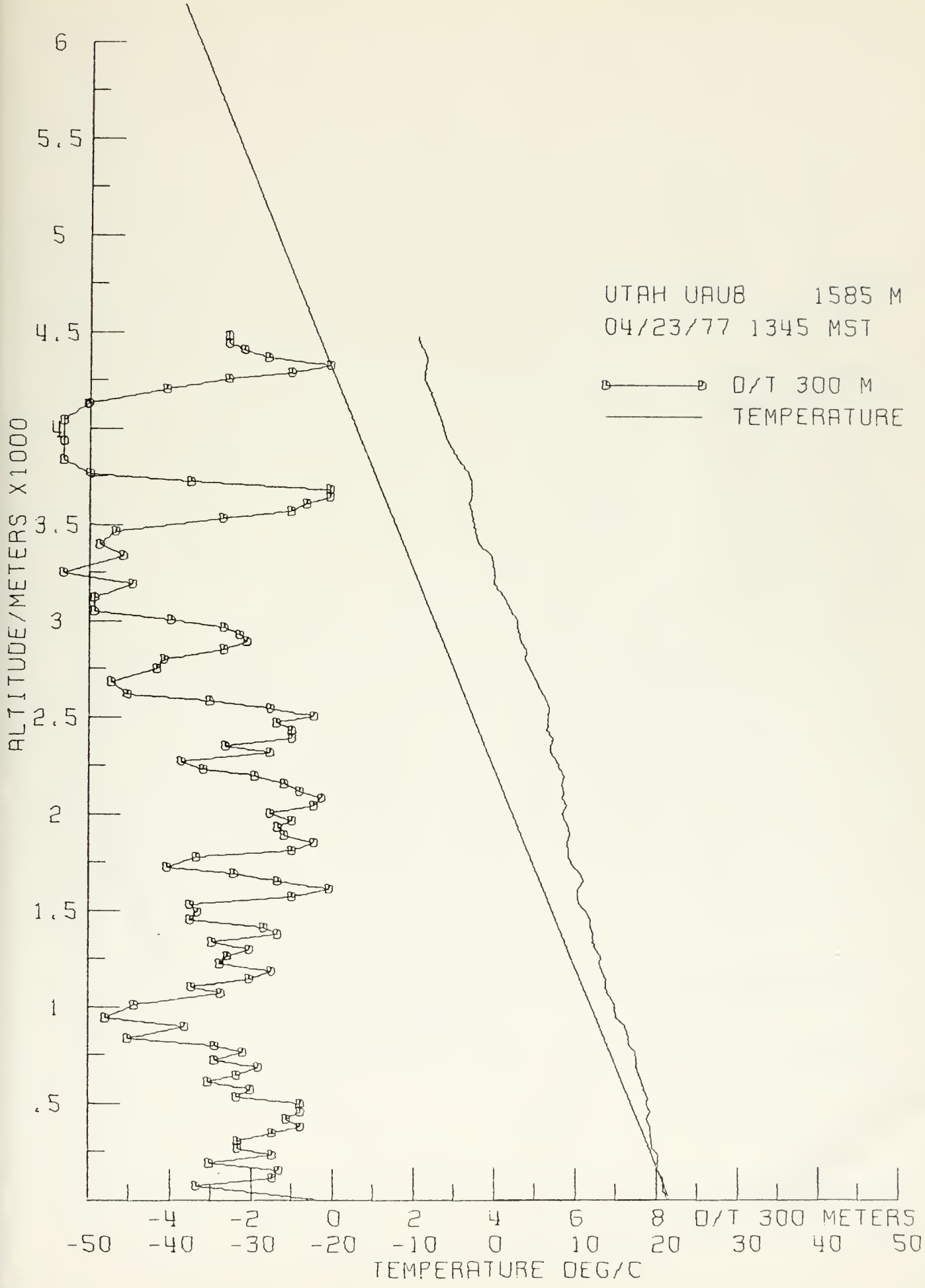
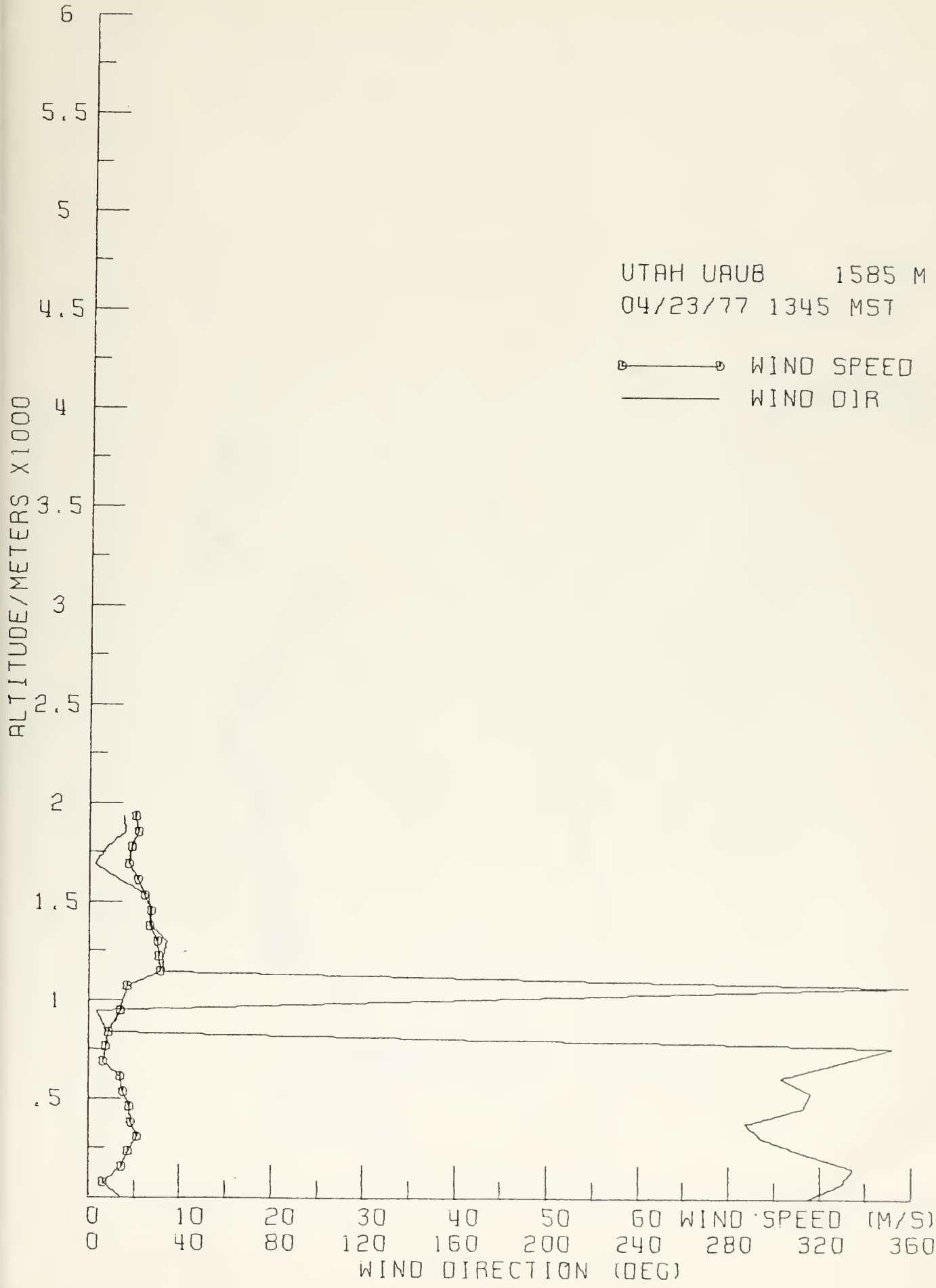
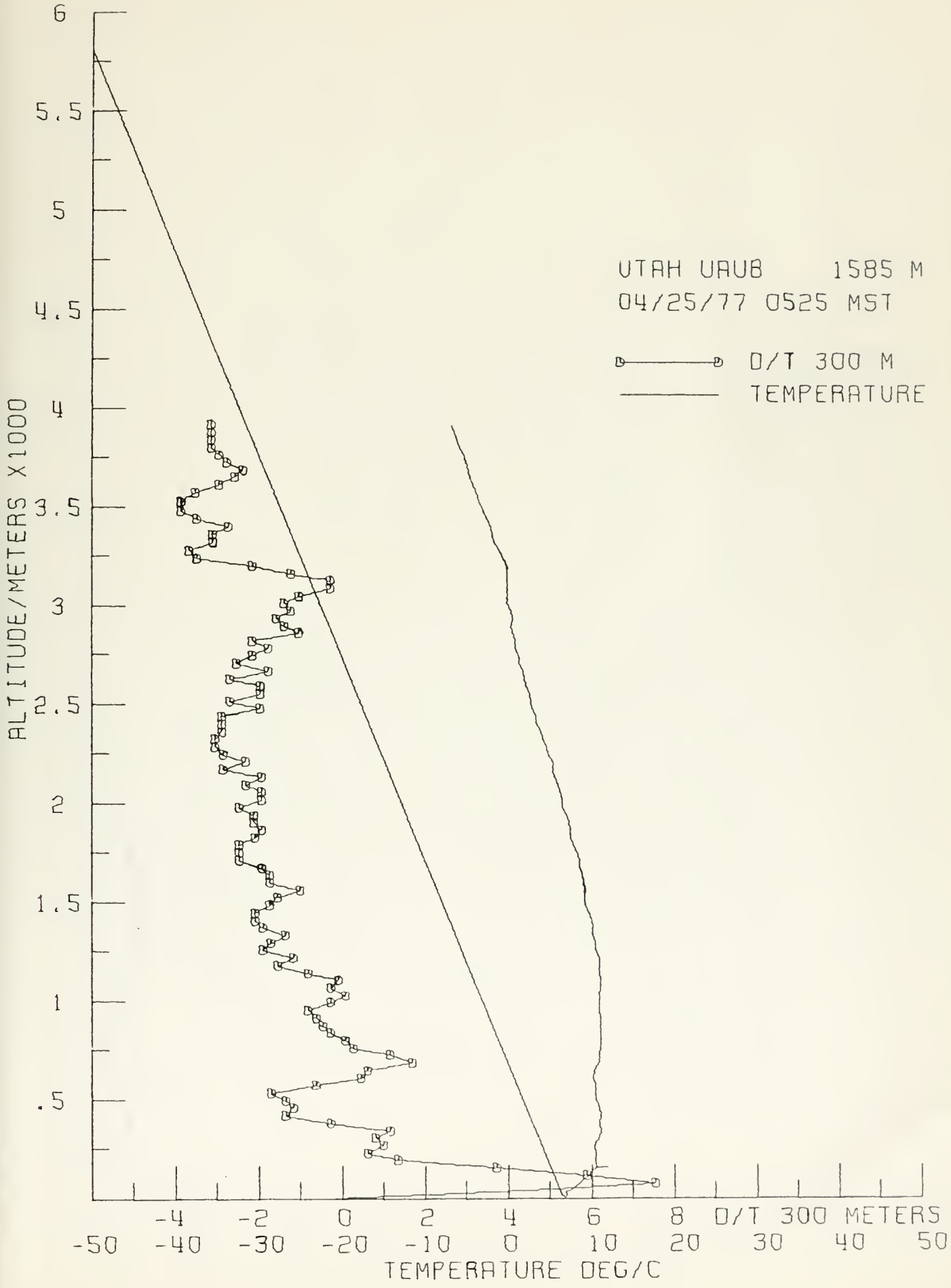
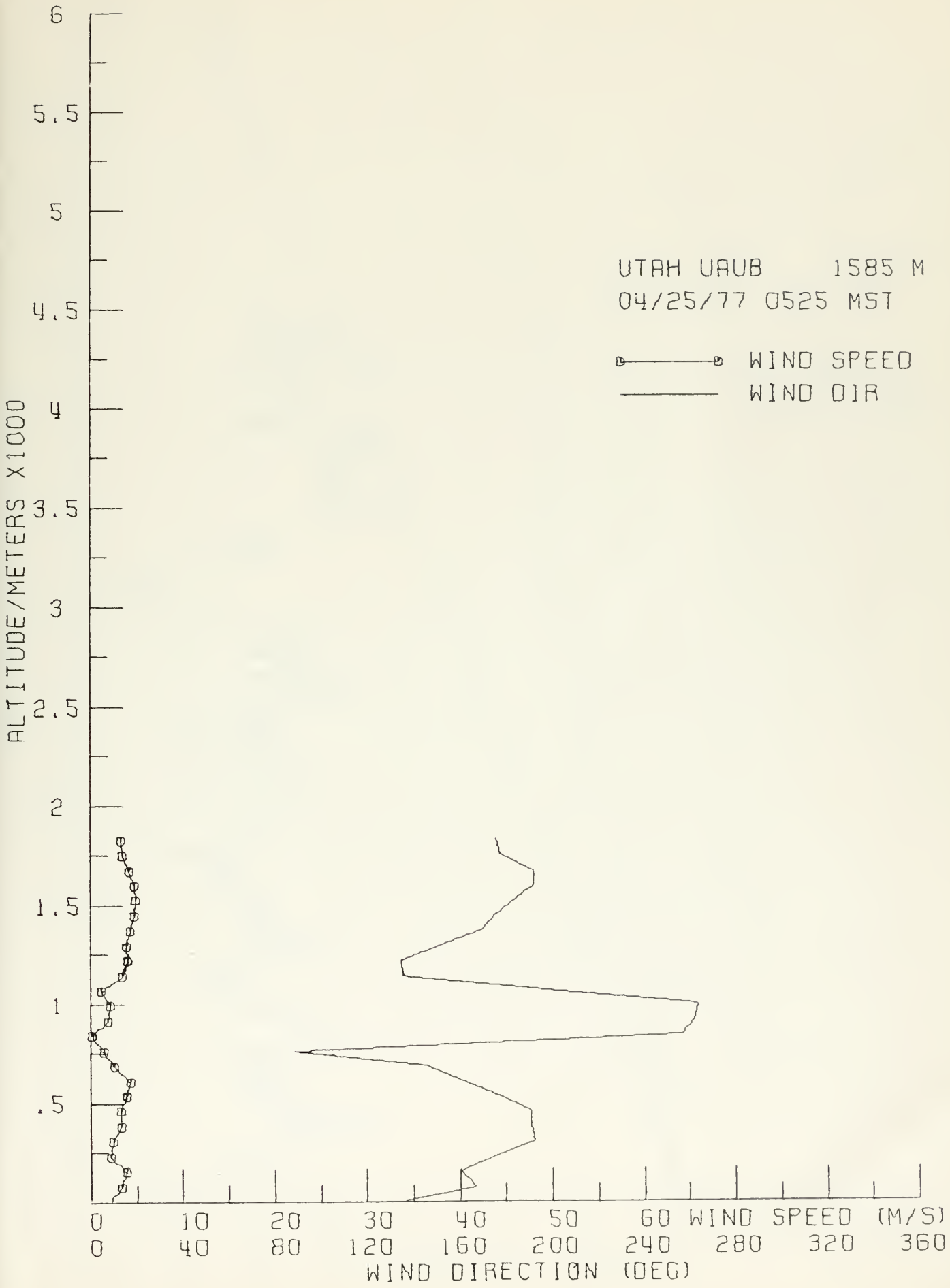
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

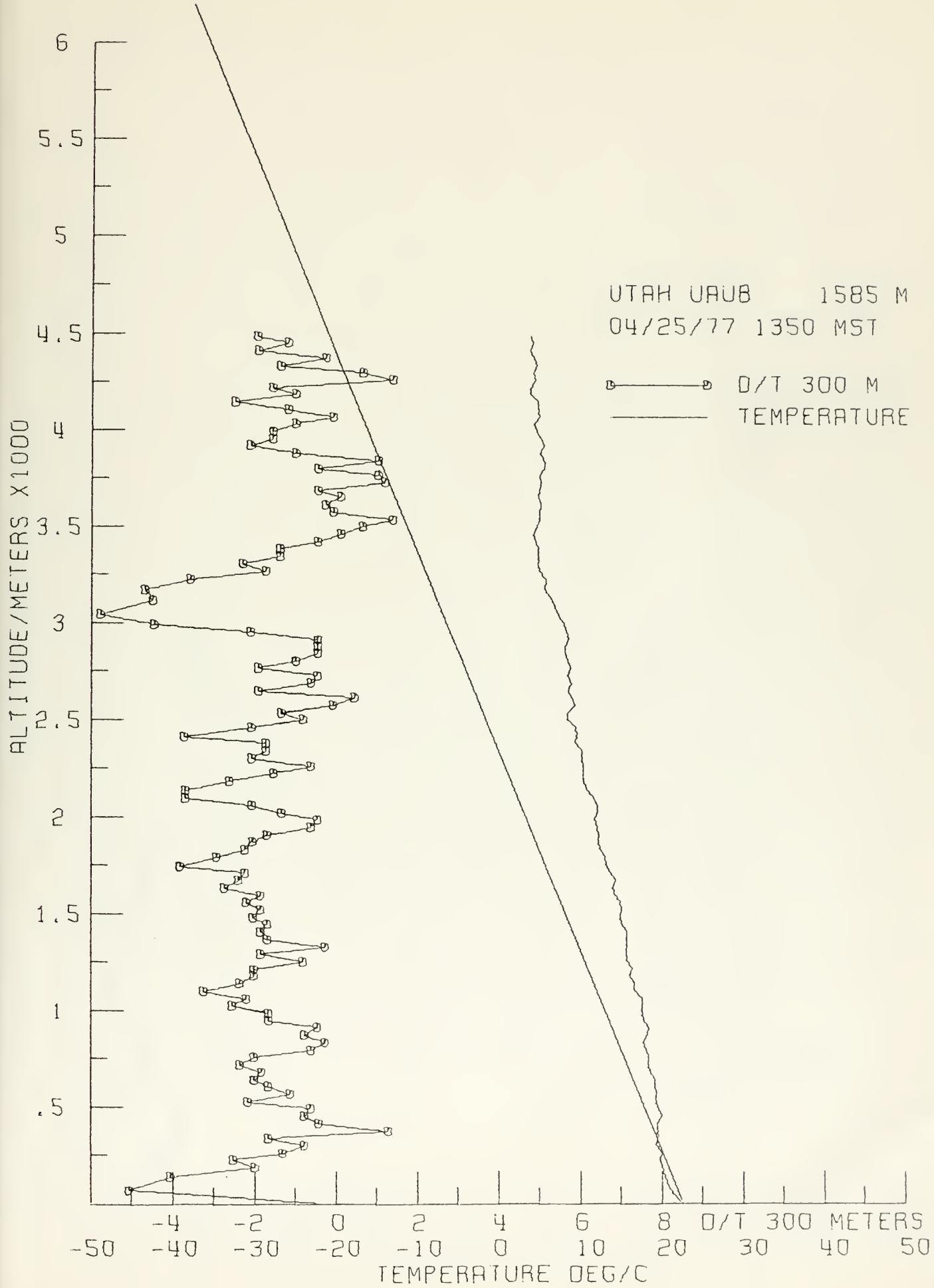

UTAH UAUB 1585 M
04/23/77 0528 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

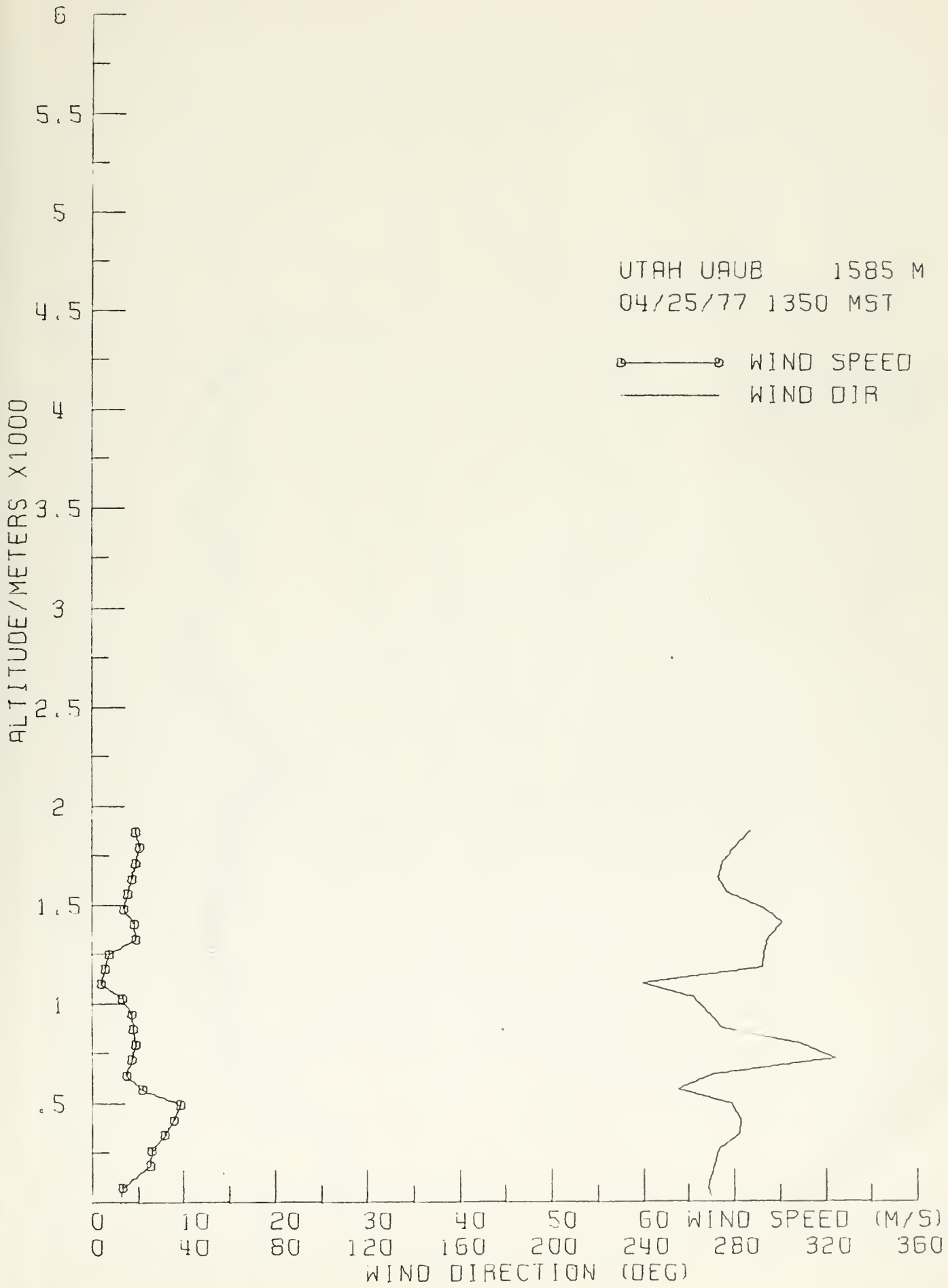

UTAH UAUB 1585 M
04/23/77 1345 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

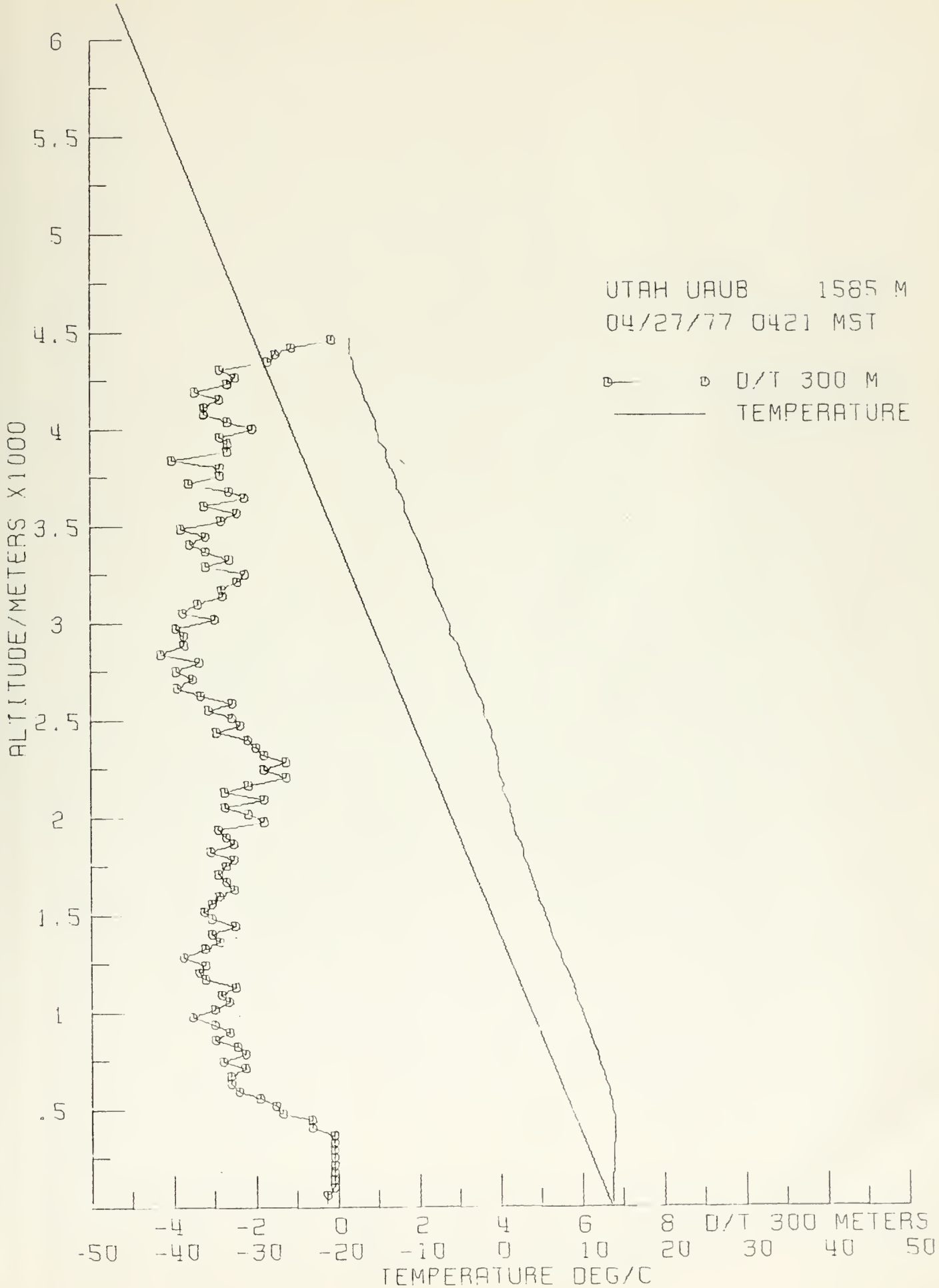

UTAH UAUB 1585 M
04/23/77 1345 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

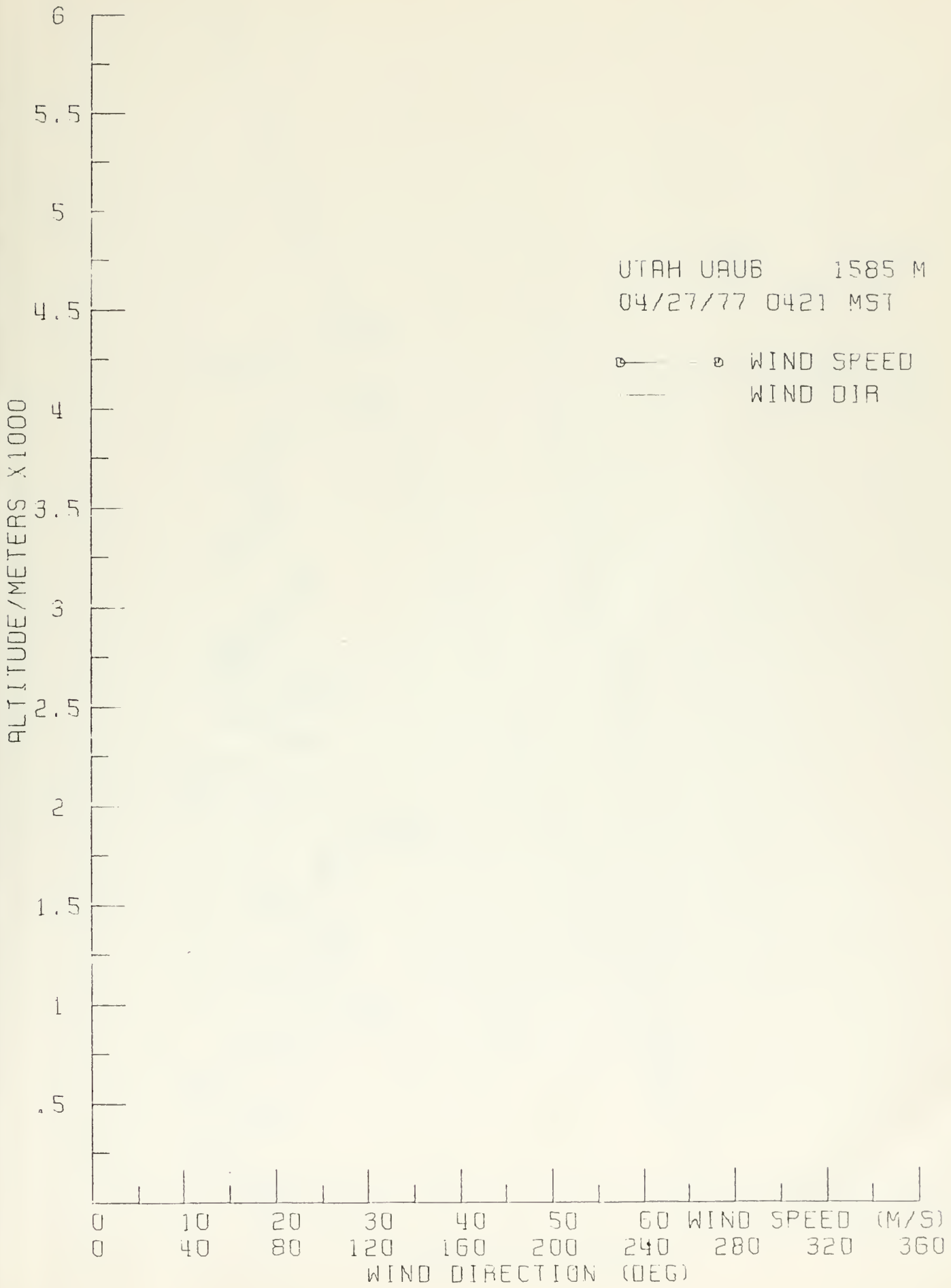

UTAH UAUB 1585 M
04/25/77 0525 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

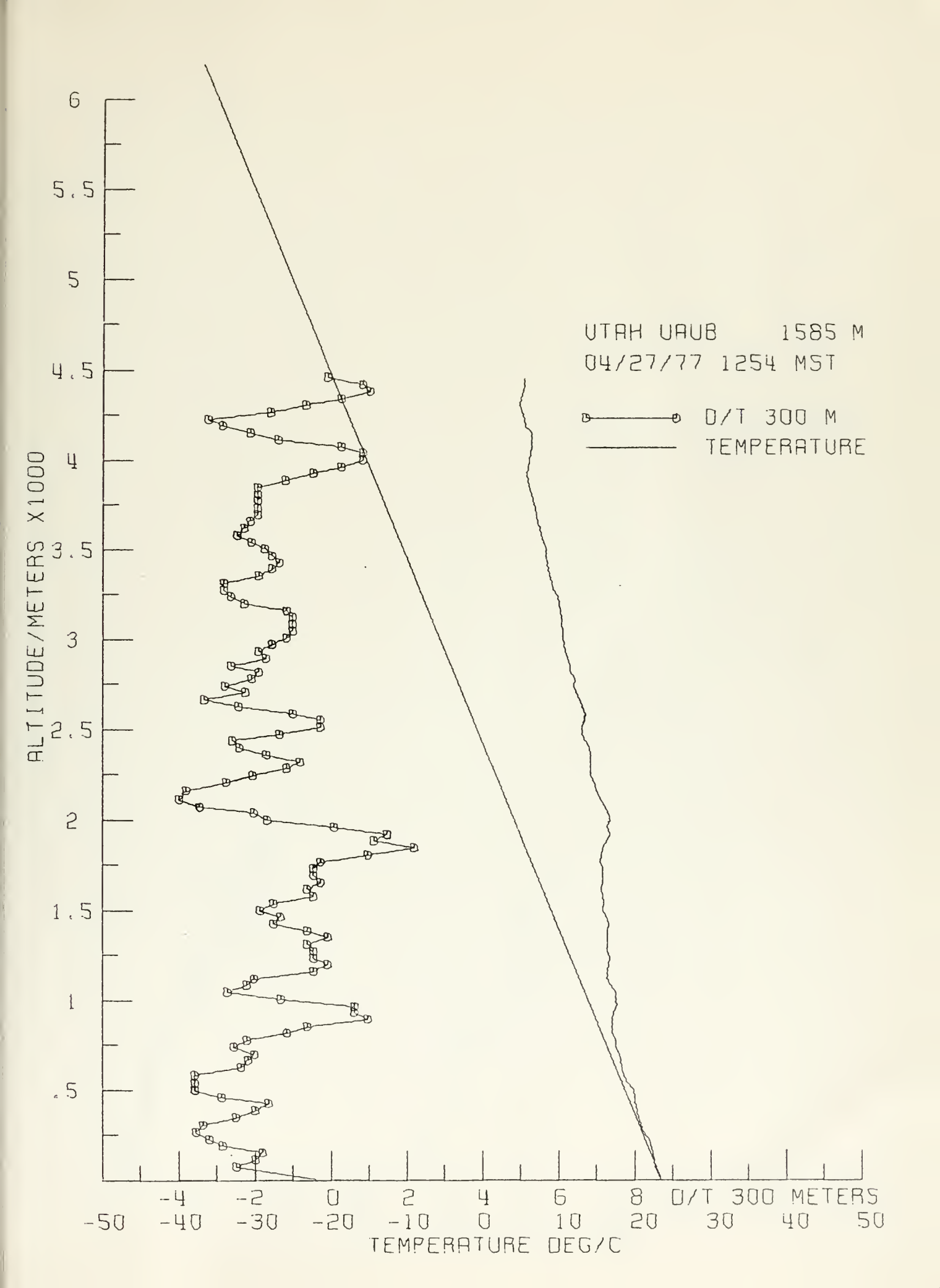

UTAH UAUB 1585 M
04/25/77 0525 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

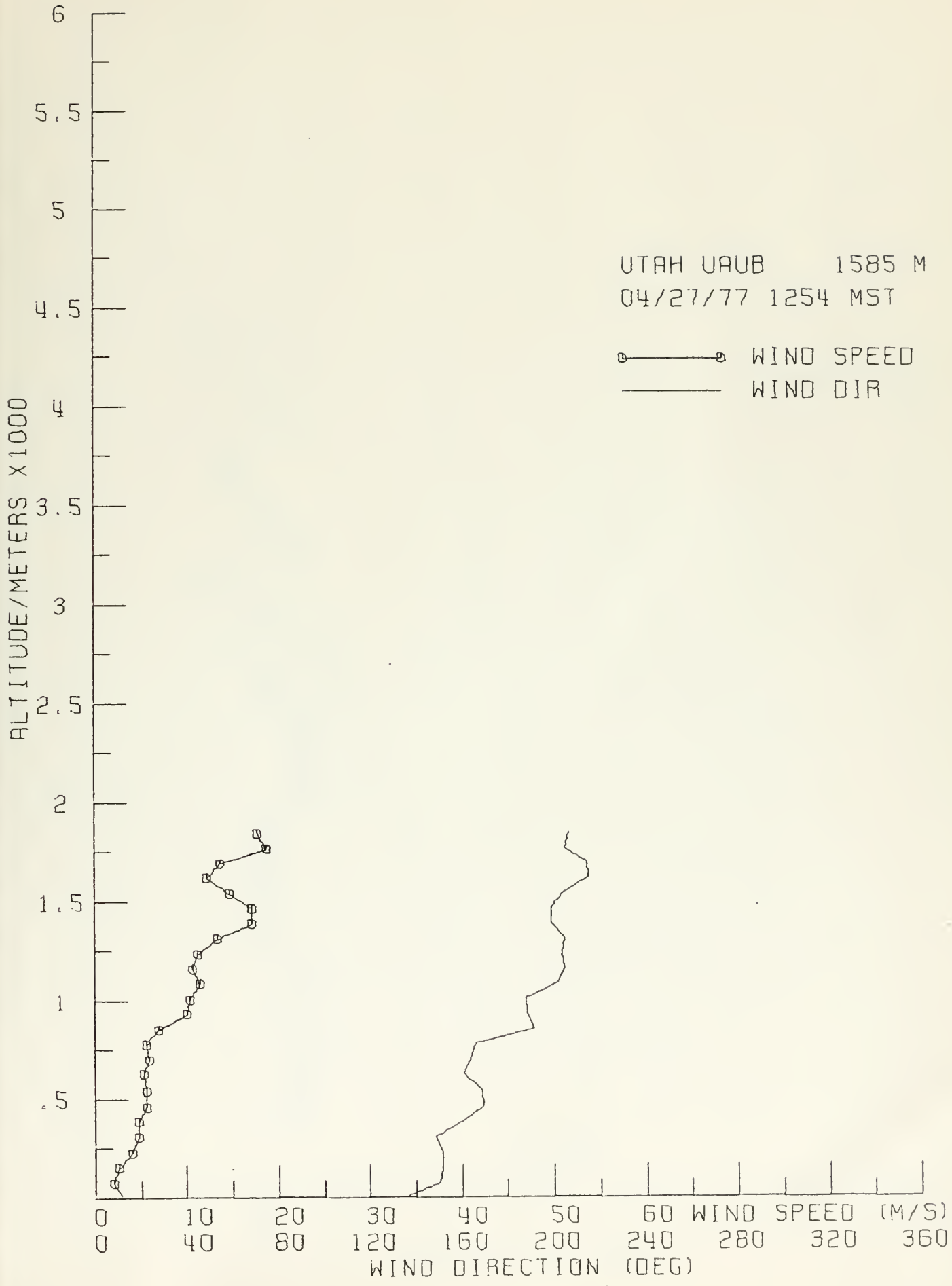

UTAH UAUB 1585 M
04/25/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

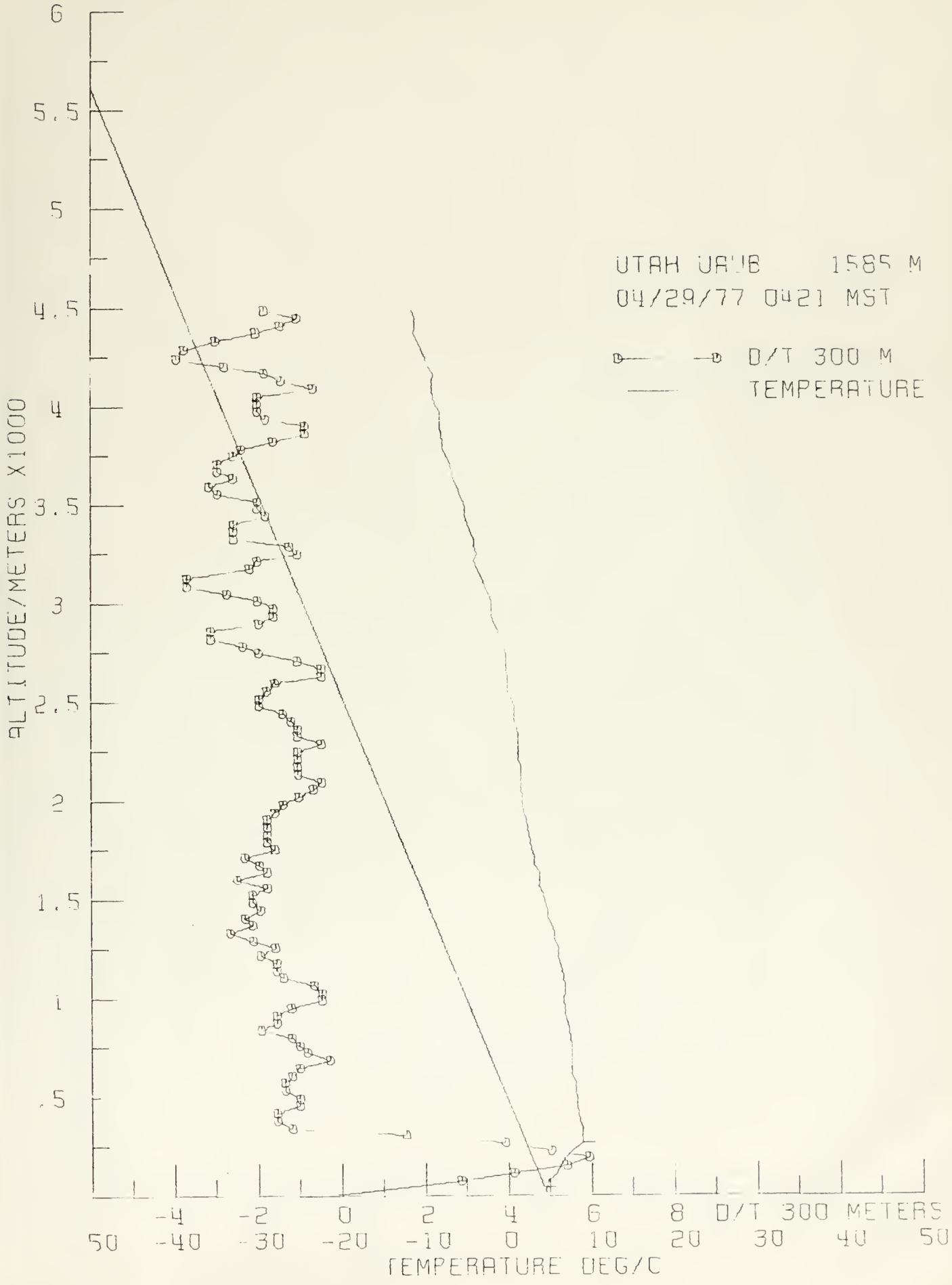

UTAH UAUB 1585 M
04/25/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

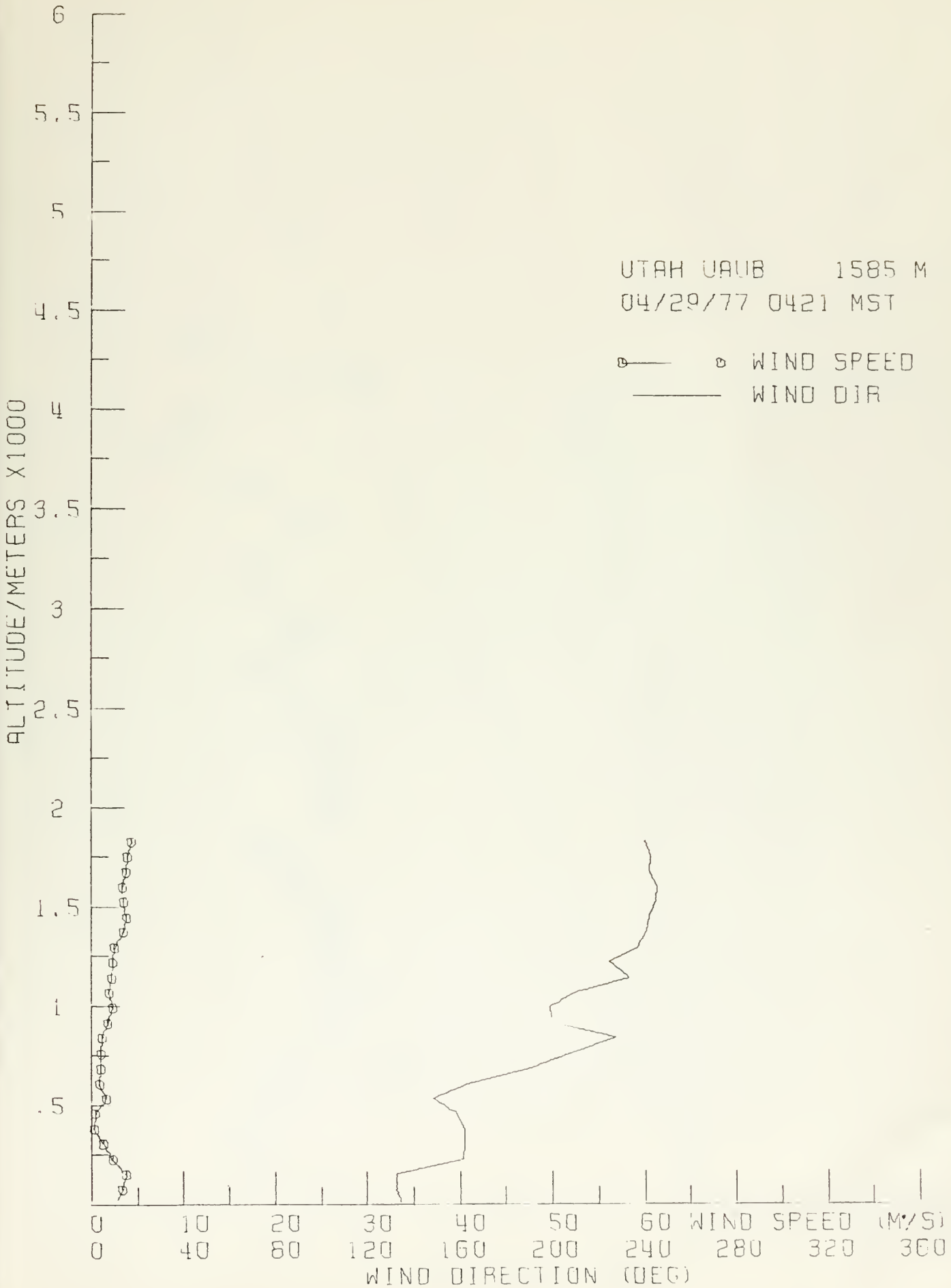

UTAH UAUB 1585 M
04/27/77 0421 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

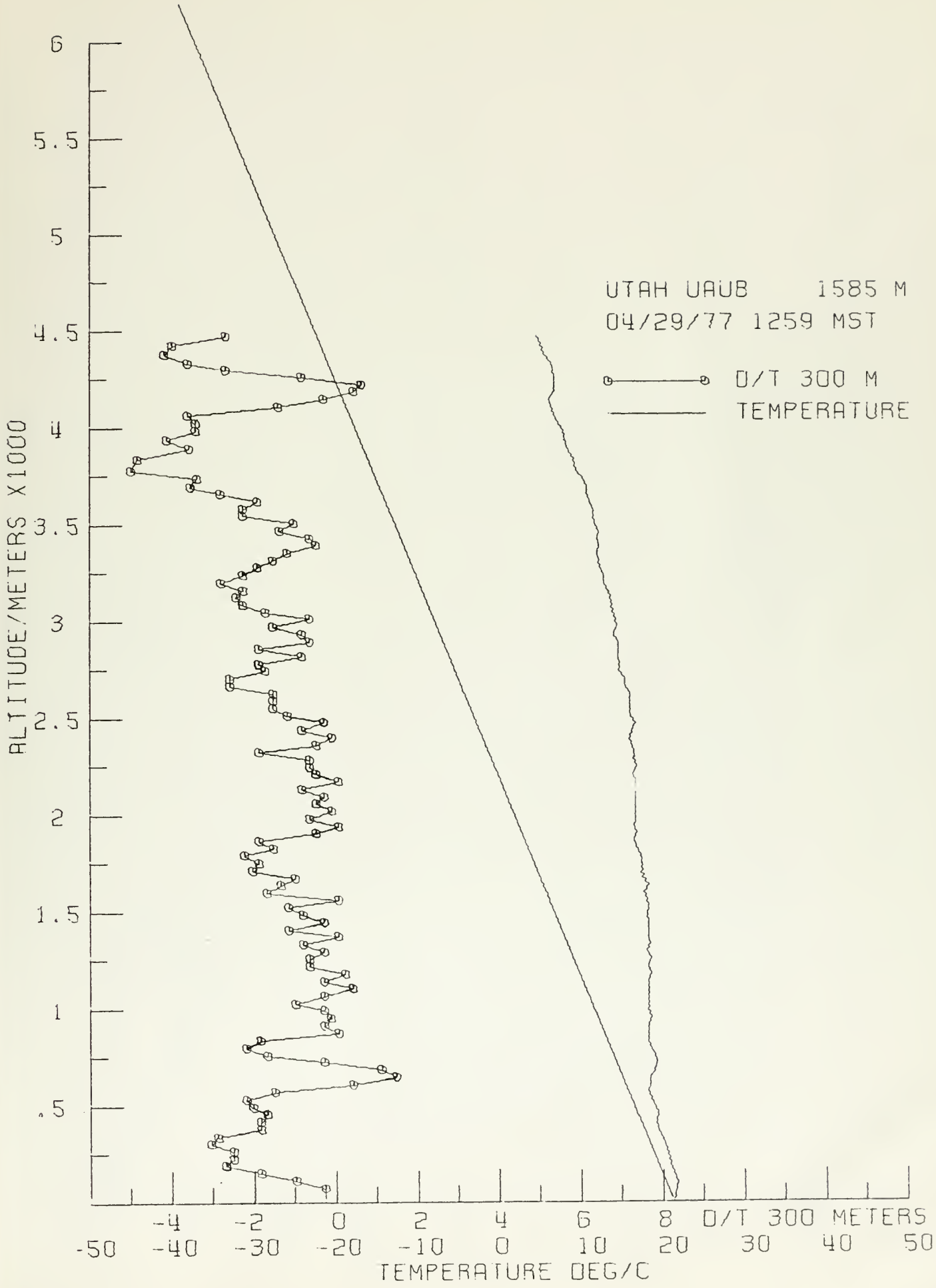

UTAH UAUB 1585 M
04/27/77 0421 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

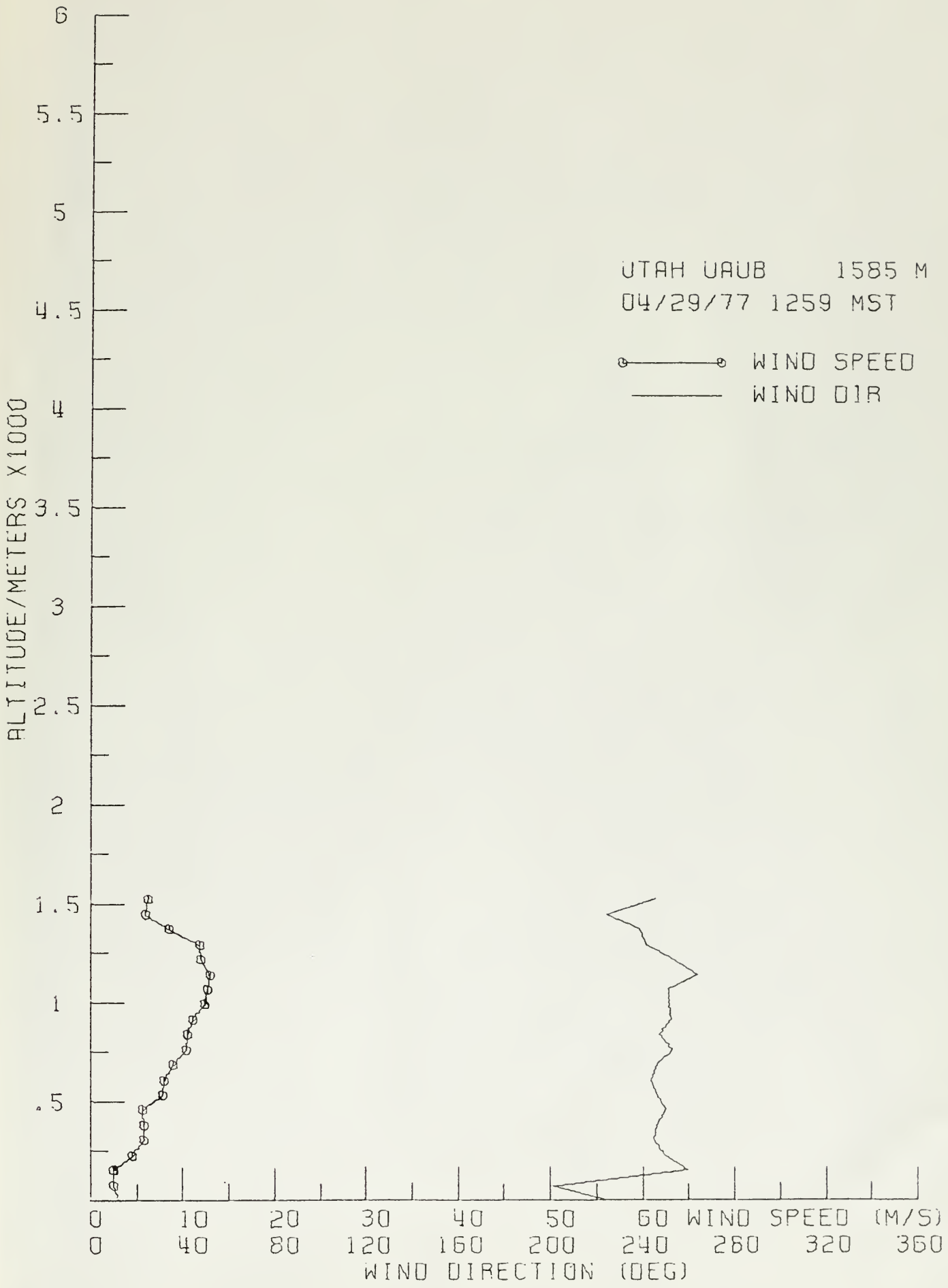

UTAH UAUB 1585 M
04/27/77 1254 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/27/77 1254 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/29/77 0421 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/29/77 0421 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
04/29/77 1259 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
04/29/77 1259 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

Form 1279–3
(June 1984)

BORROWER'S

[illegible]

Monthly progress
[illegible] for the per[illegible]

DATE LOANED	BORROWER

USDI – BLM